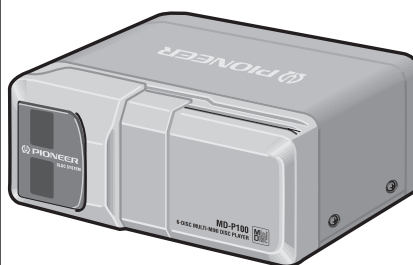


# Service Manual

**PIONEER®**  
The Art of Entertainment



ORDER NO.  
**CRT2203**

6-DISC MULTI-MINI DISC PLAYER

# MD-P100

**EW**



● US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

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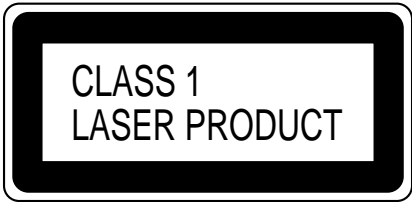
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**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan  
**PIONEER ELECTRONICS SERVICE INC.** P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.  
**PIONEER ELECTRONIC [EUROPE] N.V.** Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium  
**PIONEER ELECTRONICS ASIACENTRE PTE.LTD.** 501 Orchard Road, #10-00, Lane Wheelock Place, Singapore 23880

1. SAFETY INFORMATION

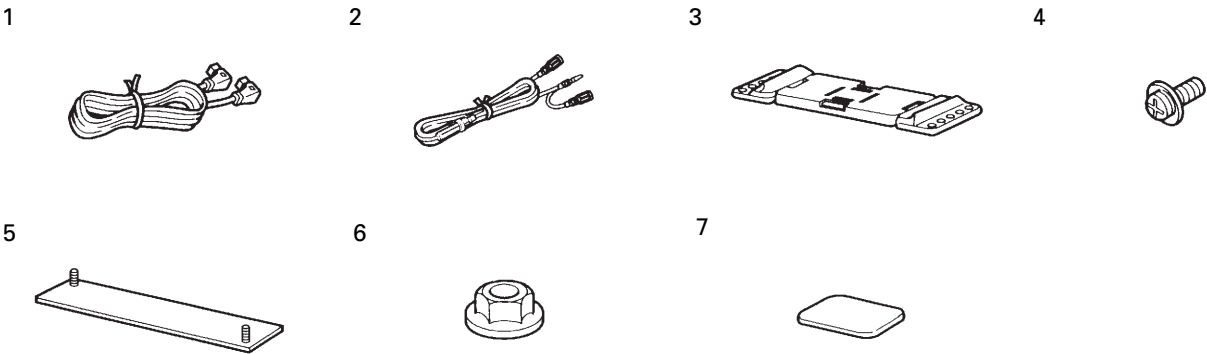
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

A "CLASS 1 LASER PRODUCT" label is affixed to the rear of the player.



2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



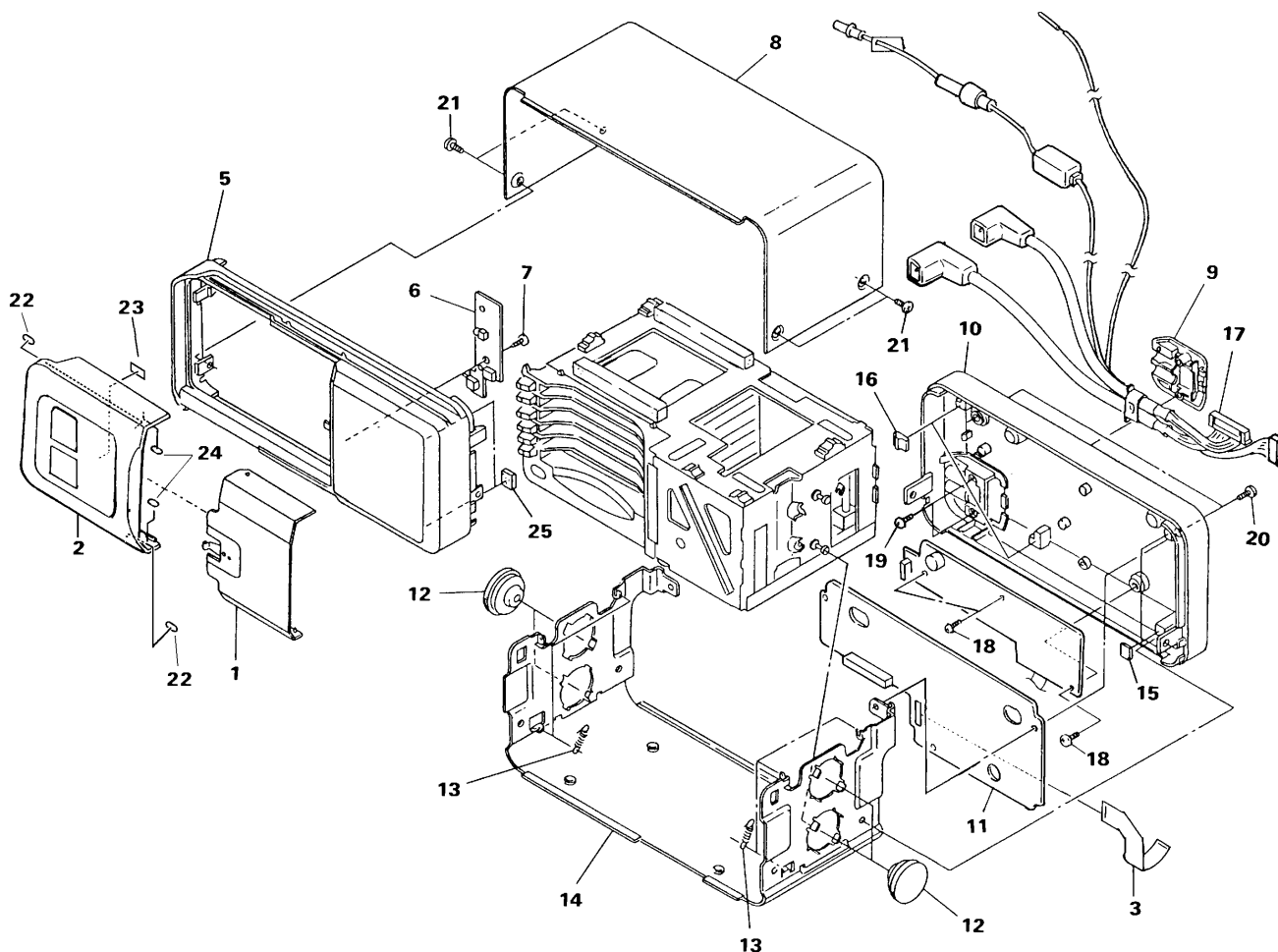
NOTE:

- Parts marked by "\*"are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ▽ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Cord	CZD3030			Owner's Manual	CZR3025
	2	Cord	CZD3036			(French, Italian, Dutch)	
	3	Base	CZN5122			Installation Manual	CZR3026
	4	PSW	CZB3044			(English, Spanish, German, French, Italian, Dutch)	
	5	Installation Base Assy	CZX3015			Warranty Card	CZR3027
	6	Nut	CZB3043	*			
	7	Cushion	CZN5092			Carton	CZH3047
		Cushion F	CZN5090			Contain Box	CZH3048
		Cushion R	CZN5091				
		Owner's Manual	CZR3024				
		(English, Spanish, German)					

## 2.2 EXTERIOR

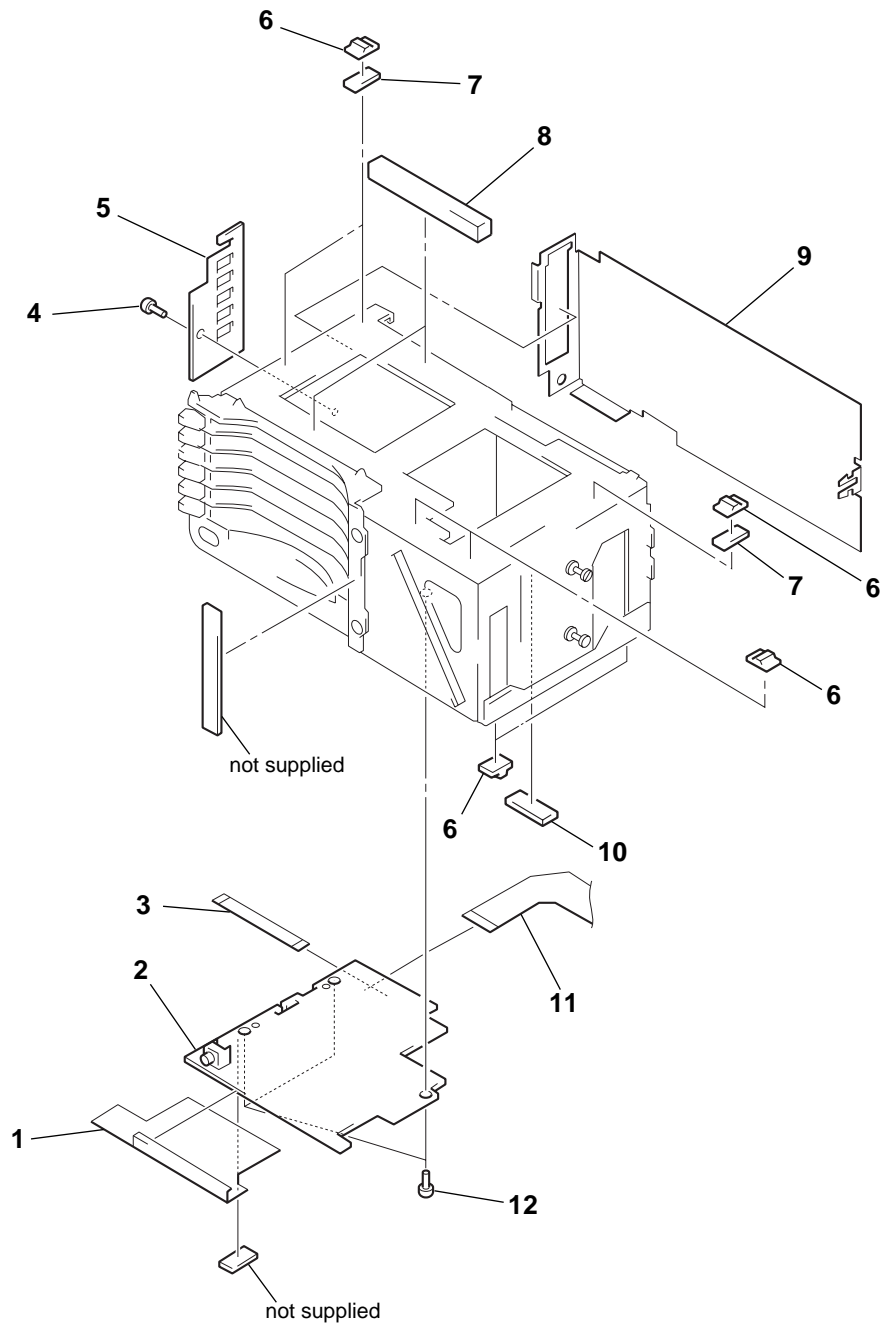


### ● EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.
1	Door Assy	CZX3010
2	Door Assy	CZX3067
3	PCB	CZN5082
4	.....	
5	Front Panel Assy	CZX3068
6	Lamp PCB	CZN5081
7	Screw	CZB3036
8	Case(Upper)	CZN5143
9	Cover	CZN5086
10	Rear Panel Assy	CZX3012
11	Power PCB Assy	CZW3061
12	Damper	CZN5071
13	Spring	CZB3038
14	Case(Lower)	CZN5142
15	Cushion	CZN5085

Mark No.	Description	Part No.
16	Cushion	CZN5068
17	Cord	CZD3037
18	Self-Tapping Screw	CZB3041
19	Self-Tapping Screw	CZB3042
20	PTT	CZB3039
21	BVTT	CZB3037
22	Sheet	CZN5080
23	Cushion	CZN5079
24	Spacer	CZN5117
25	Cushion	CZN5068

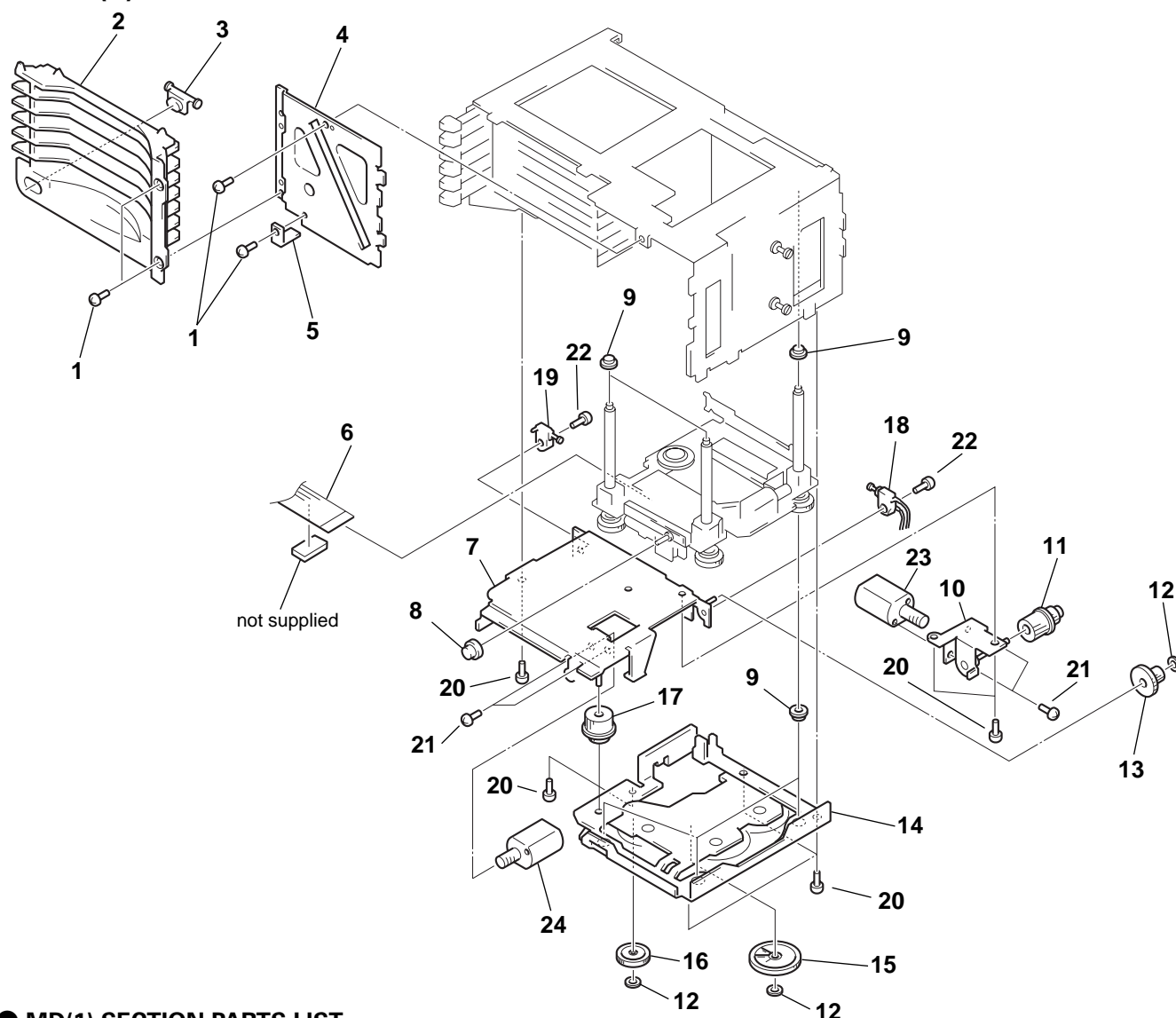
2.3 MAIN PCB



● MAIN PCB SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Sheet	CZN5073	6	Cushion	CZN5068
2	Main PCB	CZW3057	7	Cushion	CZN5069
3	Cable	CZD3029	8	Cushion	CZN5075
4	Screw	CZB3036	9	Sheet	CZN5072
5	Sensor PCB	CZN5087	10	Cushion	CZN5074
			11	PCB	CZN3100
			12	Screw	CZB3073

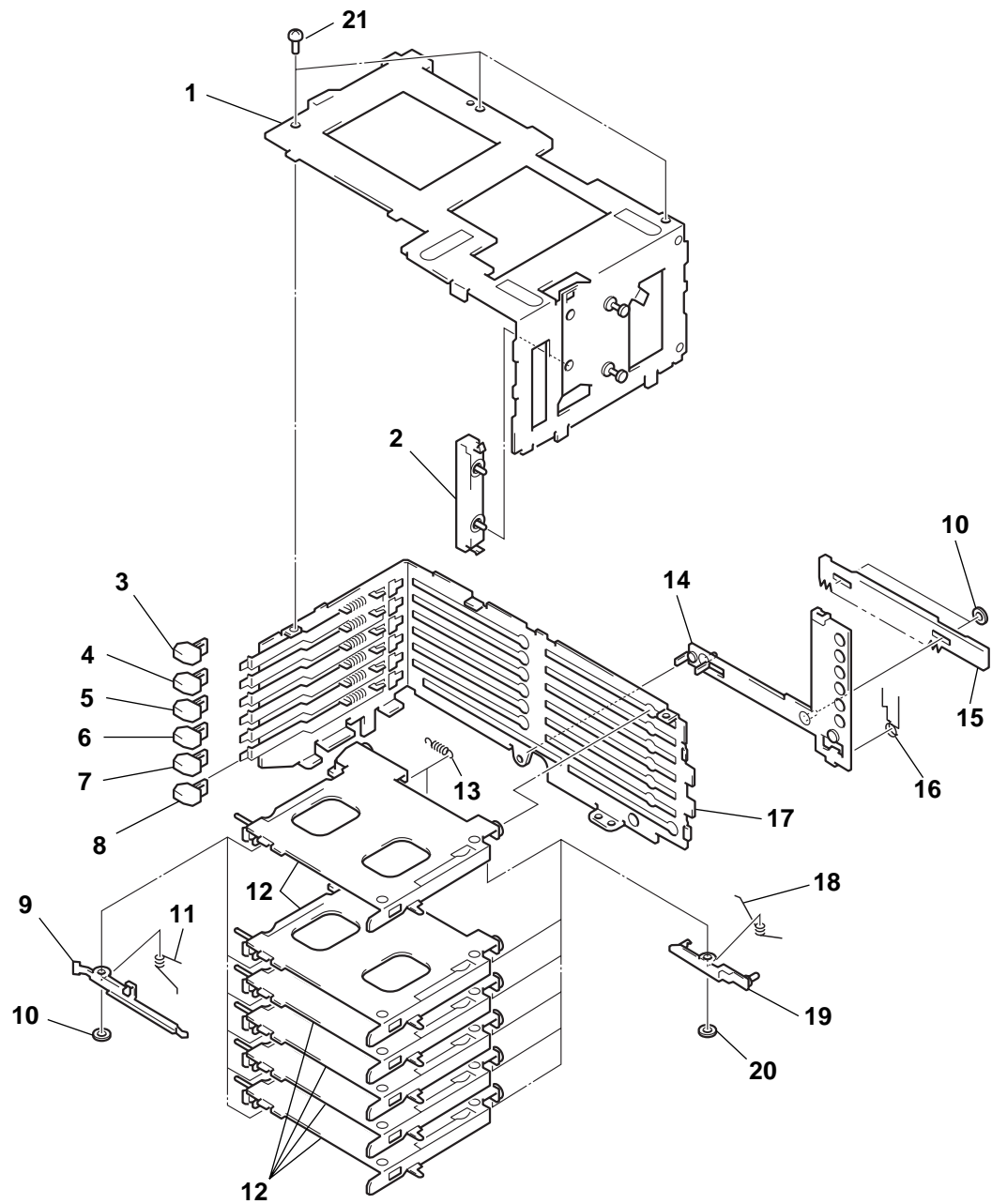
## 2.4 MD(1)



## ● MD(1) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	CZB3046	16	Gear(ELV2)	CZN5145
2	Escutcheon	CZN5098	17	Worm Wheel(ELV2)	CZN5147
3	Button(Stop)	CZA3022	18	Switch	CZS3038
4	Chassis(Front)	CZN5100	19	Switch	CZS3039
5	Plate	CZN5102	20	Screw	CZB3048
6	PCB	CZN5093	21	Screw	CZB3049
7	Chassis(Motor)Assy	CZX3069	22	Screw	CZB3059
8	Collar	CZL3004	23	LD Motor Assy	CZX3076
9	Bearing	CZN5096	24	ELV Motor Assy	CZX3077
10	Plate(LD2)Assy	CZX3071			
11	Worm Wheel	CZN5116			
12	Washer	CZB3065			
13	Gear(LD)	CZN5113			
14	Chassis(Bottom A)Assy	CZX3065			
15	Gear	CZN5097			

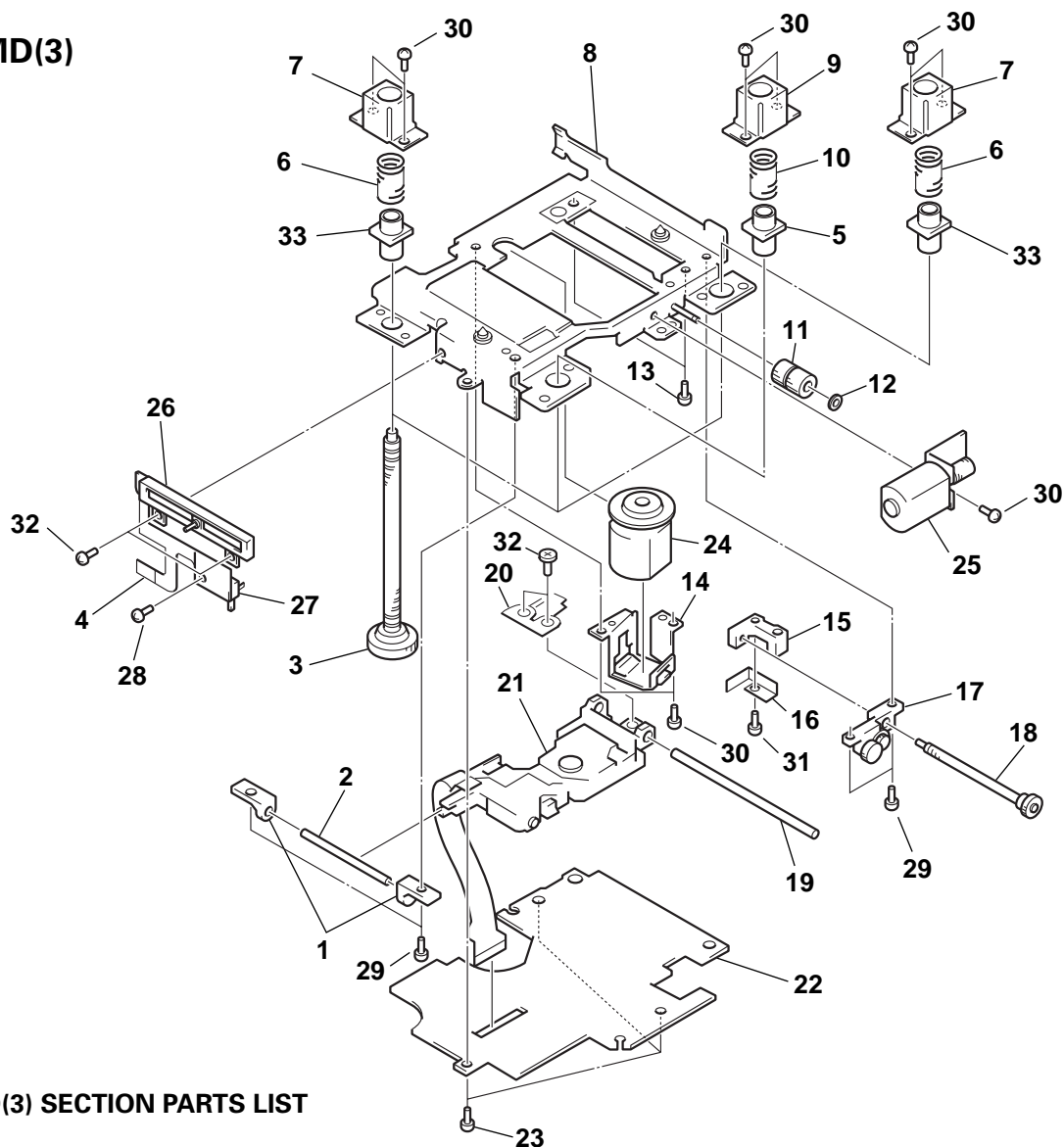
2.5 MD(2)



● MD(2) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Chassis Assy	CZX3034	11	Spring(EJ)	CZB3063
2	Guide(Holder 2)	CZN5144	12	Holder(Caddie)Assy	CZX3026
3	Button(EJECT)	CZA3023	13	Spring(D Lock)	CZB3064
4	Button(EJECT)	CZA3024	14	Loading Slider 2 Assy	CZX3070
5	Button(EJECT)	CZA3025	15	Rack(Loading)	CZN5115
6	Button(EJECT)	CZA3026	16	Spring	CZB3068
7	Button(EJECT)	CZA3027	17	Chassis(Rear 2)Assy	CZX3064
8	Button(EJECT)	CZA3028	18	Spring(Lock)	CZB3062
9	Eject Lever	CZN5112	19	Plate(Holder)Assy	CZX3027
10	Washer	CZB3065	20	Washer	CZN5111
			21	Screw	CZB3048

## 2.6 MD(3)



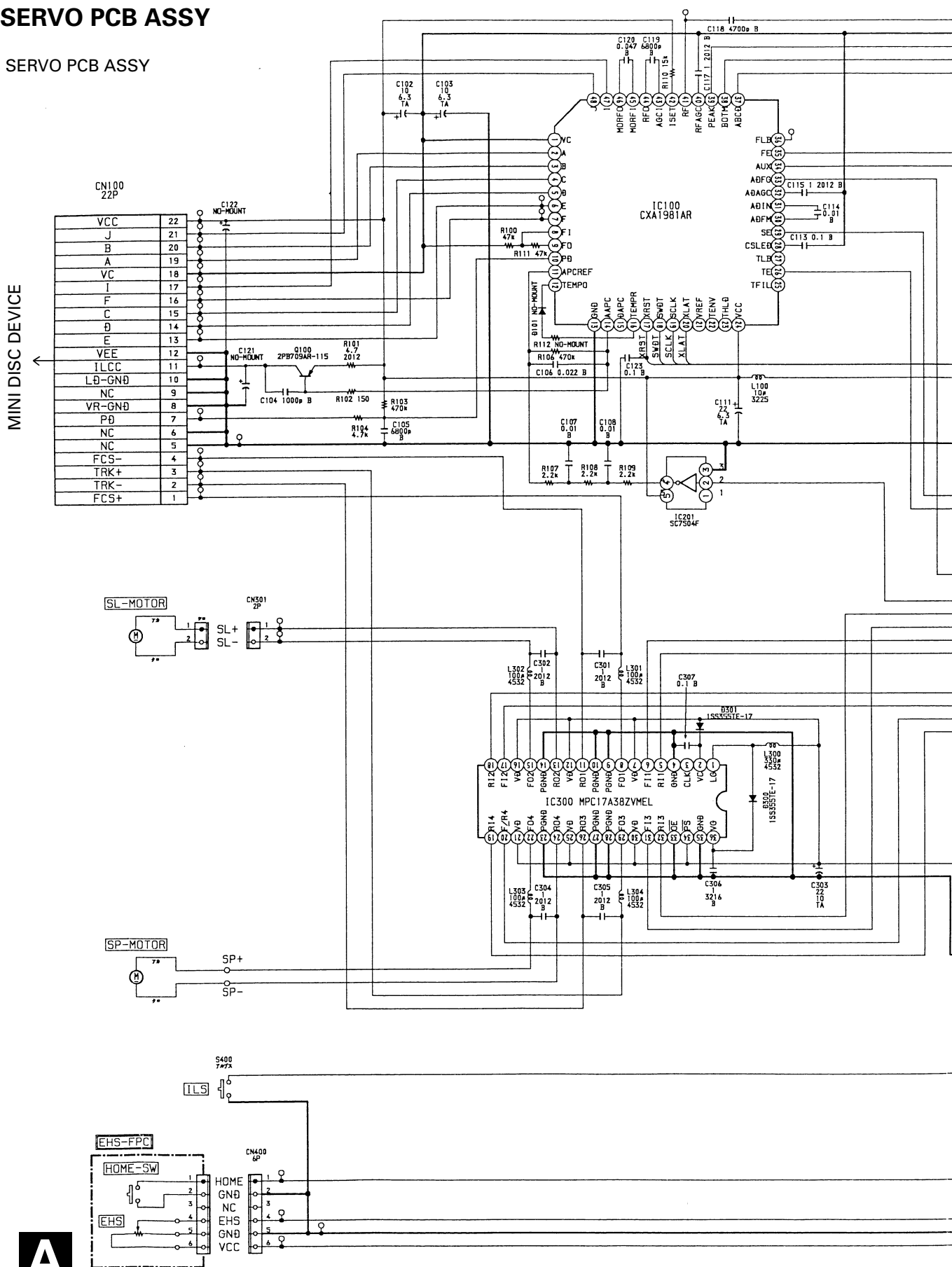
## ● MD(3) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Holder	CZN5106	16	Spring	CZB3052
2	Guide(OPB)	CZL3003	17	Holder	CZX3022
3	Screw Assy	CZX3037	18	Screw	CZX3023
4	PCB	CZN5064	19	Guide(OPA)	CZL3002
5	Sleeve(ELV)	CZN5103	20	Spring	CZN5105
6	Spring(ELV)	CZB3051	21	Mini Disc Device	CZG3005
7	ELV Limiter Plate B	CZN5110	22	Servo PCB Assy	CZW3054
8	Chassis(OP)Assy	CZX3024	23	Screw	CZB3054
9	ELV Limiter Plate A	CZN5109	24	SP Motor	CZX3019
10	Spring	CZB3053	25	SL Motor Assy	CZX3020
11	Worm Wheel	CZN5107	26	Slide Variable Resistor	CZC5118
12	Washer	CZB3050	27	Switch	CZS3039
13	Screw	CZB3070	28	Screw	CZB3059
14	Plate	CZN5108	29	Screw	CZB3056
15	Holder(SLB)	CZN5104	30	Screw	CZB3055
			31	Screw	CZB3058
			32	Screw	CZB3048
			33	Sleeve(ELV2)	CZN5146

# 3. SCHEMATIC DIAGRAM

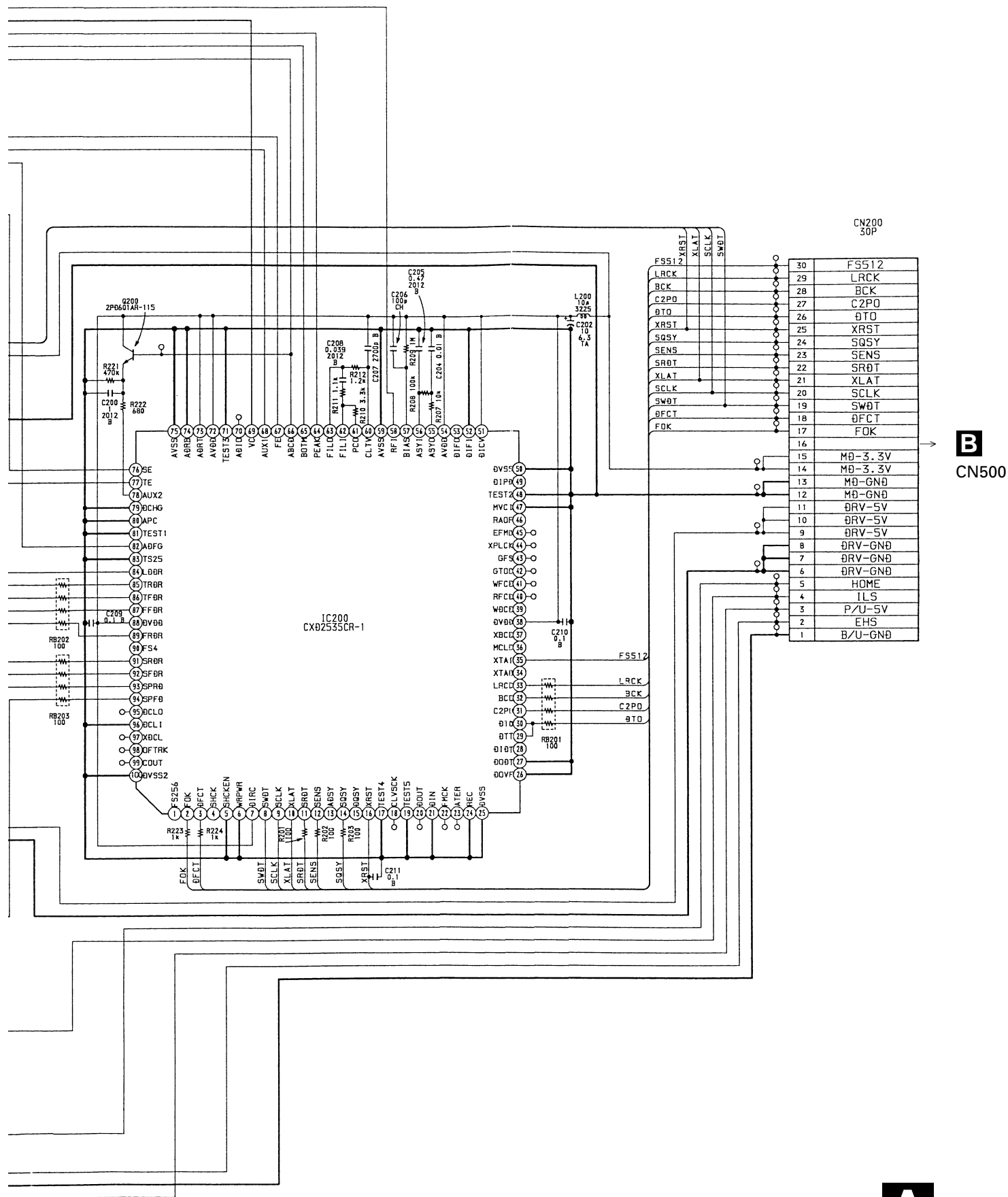
## 3.1 SERVO PCB ASSY

**A** SERVO PCB ASSY



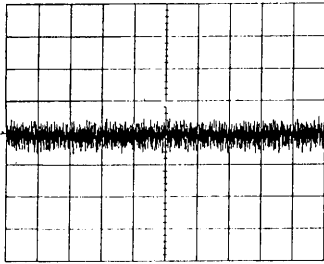


**Note: When ordering service parts, be sure to refer to “EXPLODED VIEWS AND PARTS LIST” or “ELECTRICAL PARTS LIST”.**

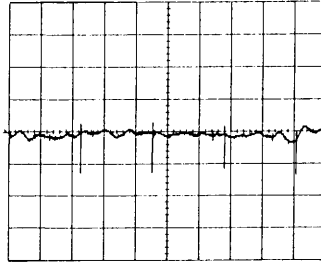


## ● Waveforms

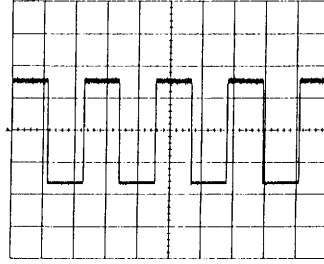
① IC100 ② (A) PLAY MODE  
Approx. 200mVp-p, 500  $\mu$ s



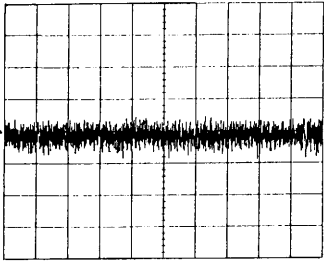
⑤ IC100 ⑤ (FE) PLAY MODE  
Approx. 1Vp-p, 500  $\mu$ s



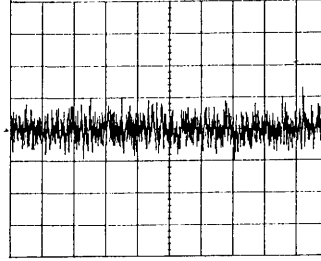
⑪ IC200 ⑬ (LRCK)  
1Vp-p, 10  $\mu$ s



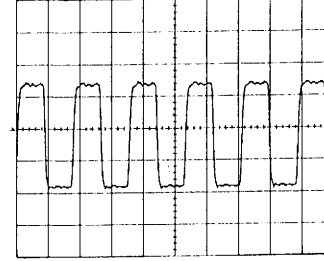
② IC100 ⑥ (E) PLAY MODE  
Approx. 100mVp-p, 500  $\mu$ s



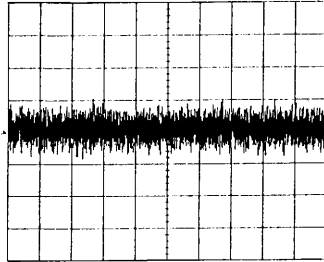
⑦ IC100 ⑥ (TE) PLAY MODE  
Approx. 200mVp-p, 5  $\mu$ s



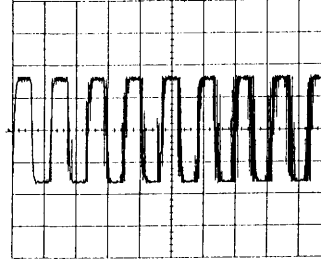
⑫ IC200 ⑭ (BCK)  
1Vp-p, 2  $\mu$ s



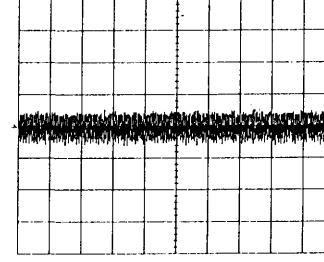
③ IC100 ⑦ (F) PLAY MODE  
Approx. 100mVp-p, 500  $\mu$ s



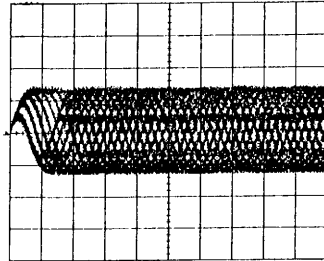
⑧ IC200 ④ (XPLCK)  
1Vp-p, 200ns



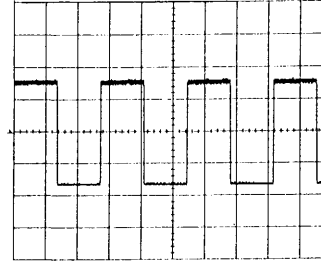
⑬ IC200 ⑮ (FMCK)  
100mVp-p, 2  $\mu$ s



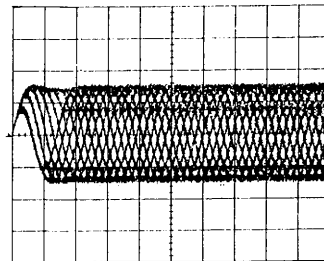
④ IC100 ⑦, ⑧ (J, I) PLAY MODE  
Approx. 200mVp-p, 1  $\mu$ s



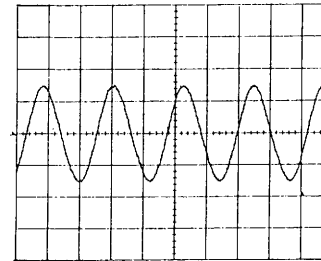
⑨ IC200 ⑩ (WFCK)  
1Vp-p, 50  $\mu$ s



⑤ IC100 ⑩ (RF) PLAY MODE  
Approx. 500mVp-p, 1  $\mu$ s



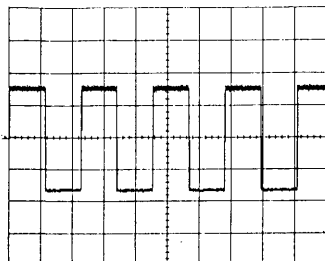
⑩ IC200 ⑮ (XTAL)  
3Vp-p, 22.5792MHz



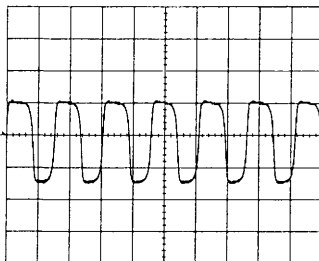
## 3.2 MAIN PCB

### ● Waveforms

① IC500 ⑩ (LRCK)  
1Vp-p, 10  $\mu$ s



⑥ IC600 ⑭ (TX)  
5.2Vp-p, 32.768kHz



② IC500 ⑪ (BCK)  
20mVp-p, 2  $\mu$ s



⑦ IC600 ⑰ (XTAL)  
4.2Vp-p, 10MHz



**B** MAIN PCB

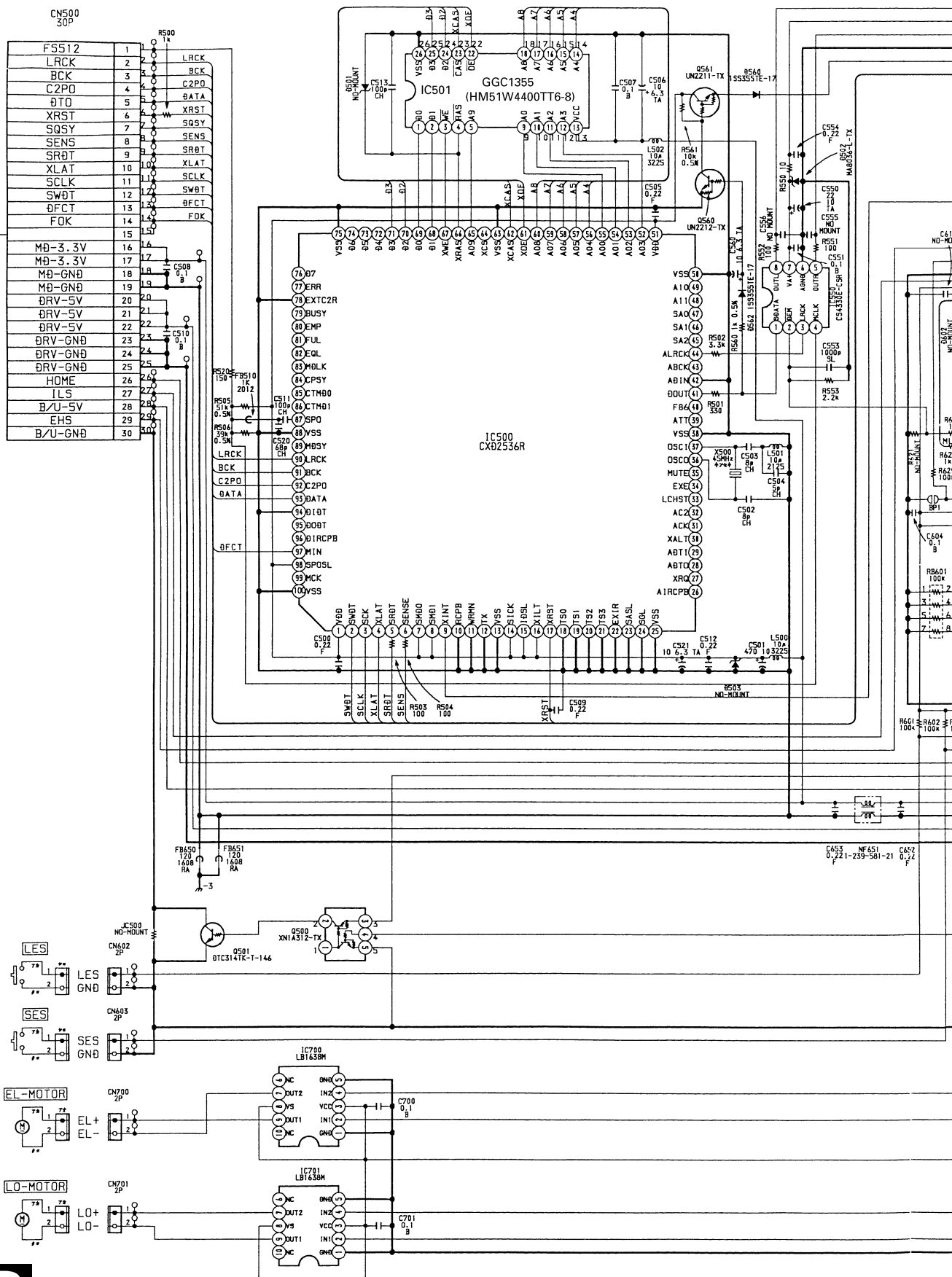
A

**A**  
CN200

B

C

D





CN5

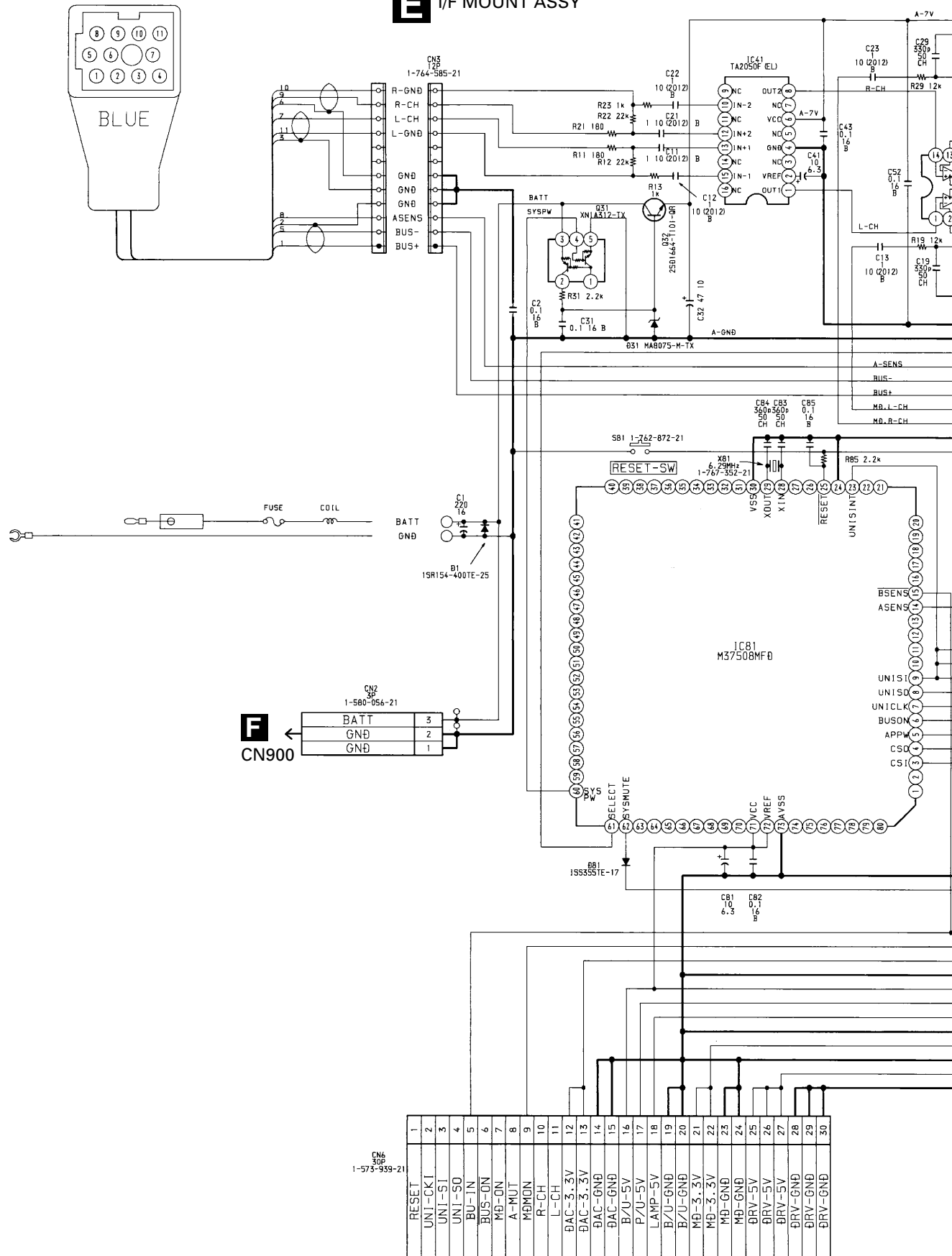
C

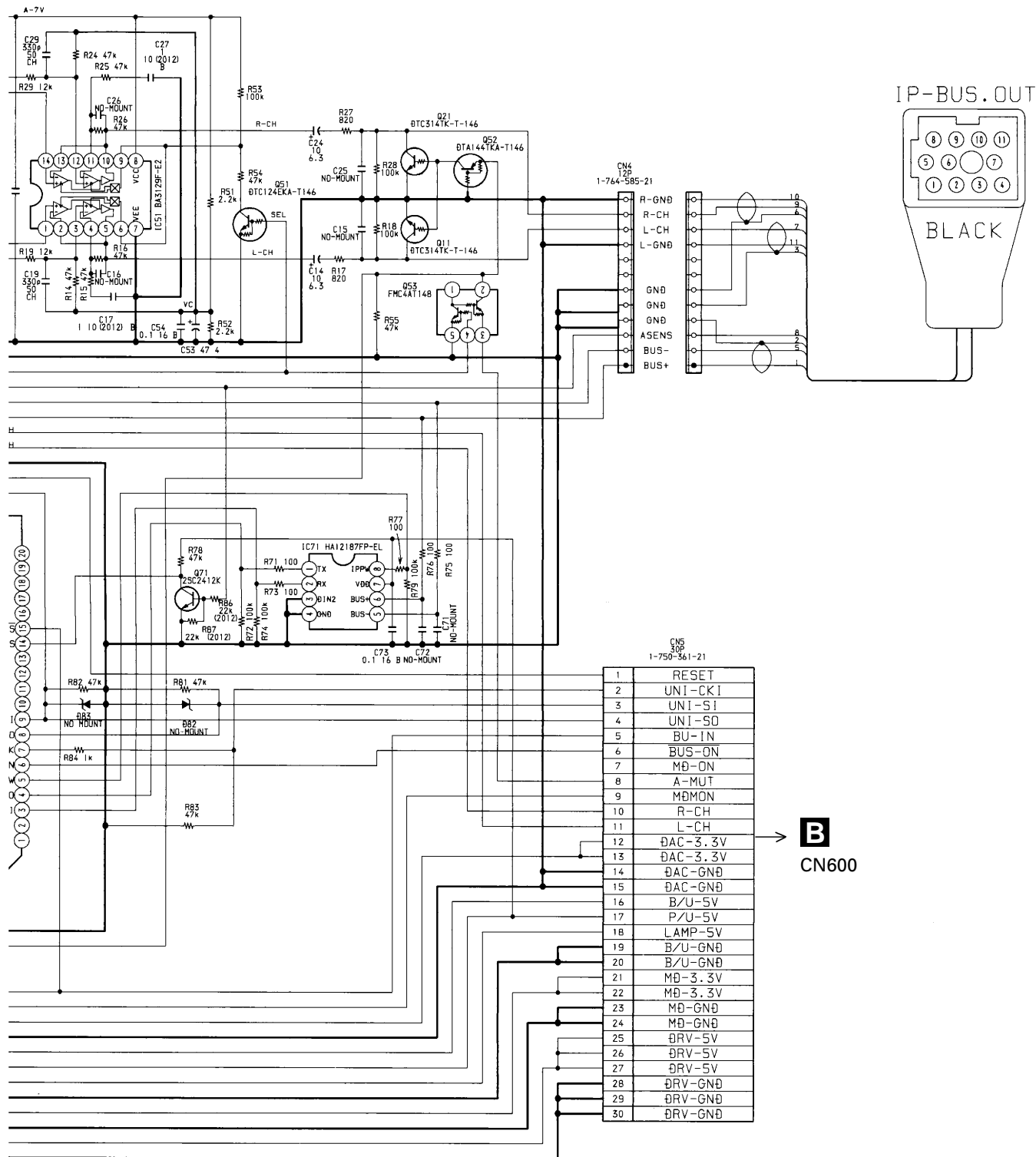
D

3.3 I/F MOUNT ASSY

IP-BUS.IN

I/F MOUNT ASSY



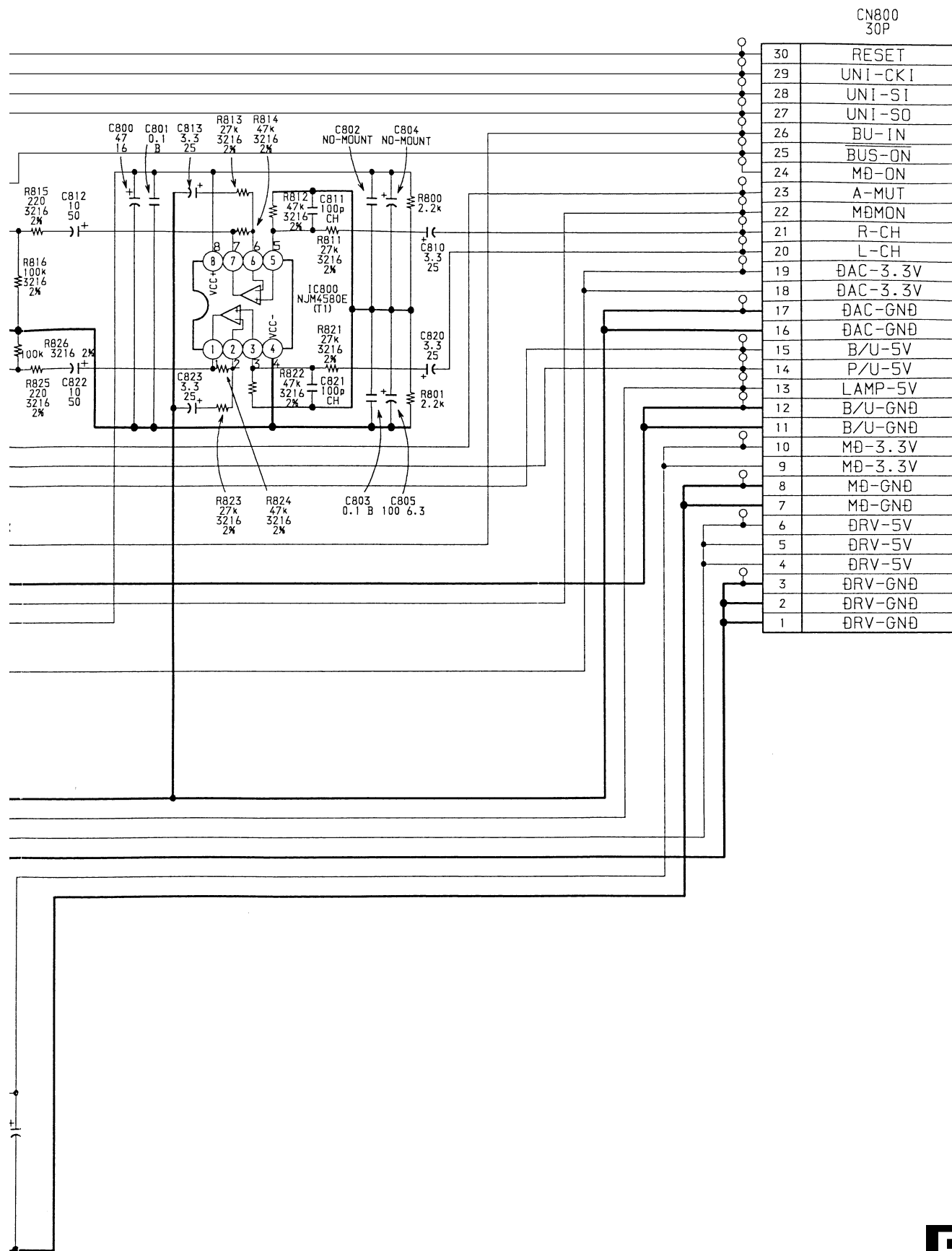


1	RESET
2	UNI-CKI
3	UNI-SI
4	UNI-SO
5	BU-IN
6	BUS-ON
7	MD-ON
8	A-MUT
9	MDMON
10	R-CH
11	L-CH
12	DAC-3.3V
13	DAC-3.3V
14	DAC-GND
15	DAC-GND
16	B/U-5V
17	P/U-5V
18	LAMP-5V
19	B/U-GND
20	B/U-GND
21	MD-3.3V
22	MD-3.3V
23	MD-GND
24	MD-GND
25	DRV-5V
26	DRV-5V
27	DRV-5V
28	DRV-GND
29	DRV-GND
30	DRV-GND

**B**  
CN600





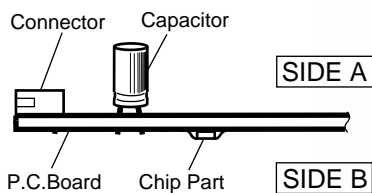


## 4. PCB CONNECTION DIAGRAM

### 4.1 POWER PCB ASSY

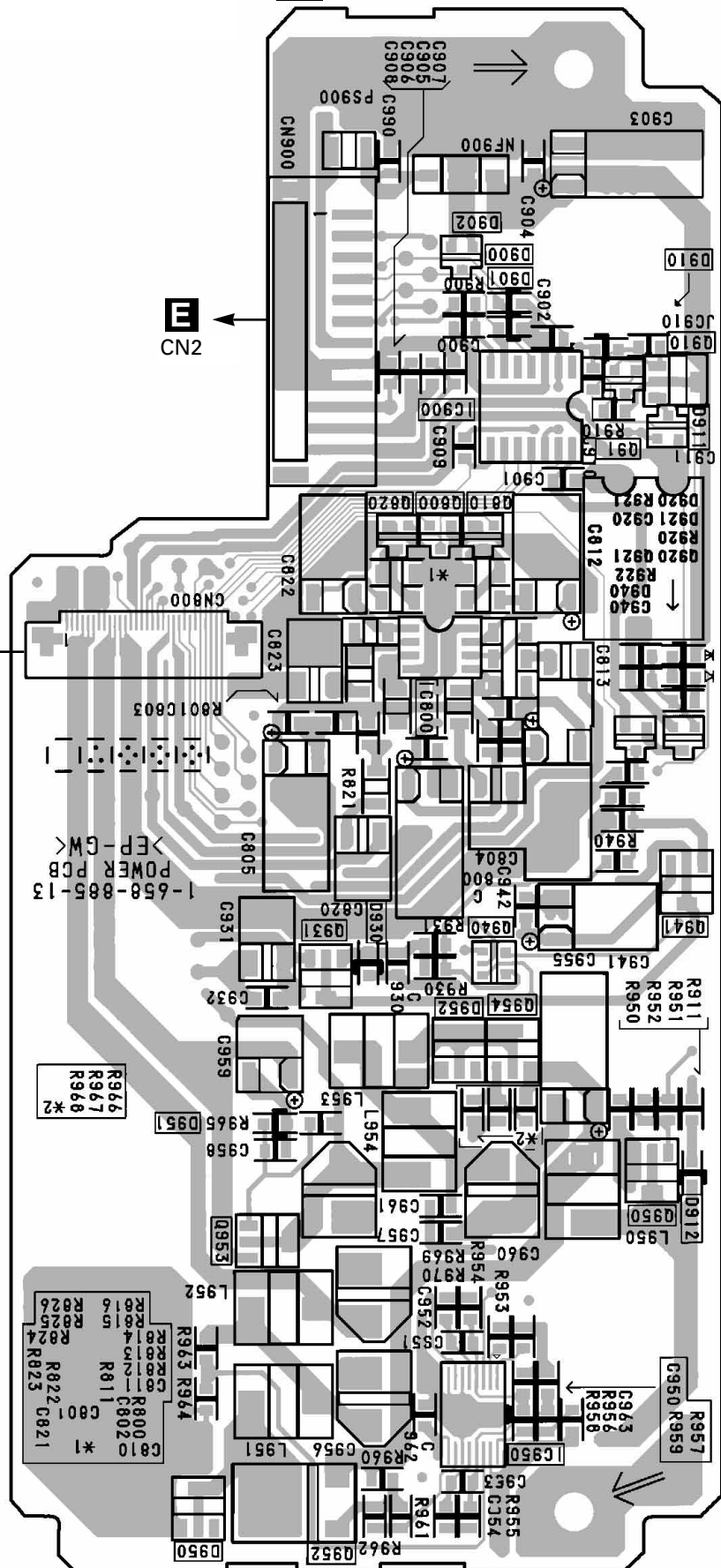
#### NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.  
For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams



### POWER PCB ASSY

SIDE A



IC,Q

Q910

IC900

Q911

Q820

Q800

Q810

IC800

Q921

Q920

Q941

Q940

Q931

Q954

Q950

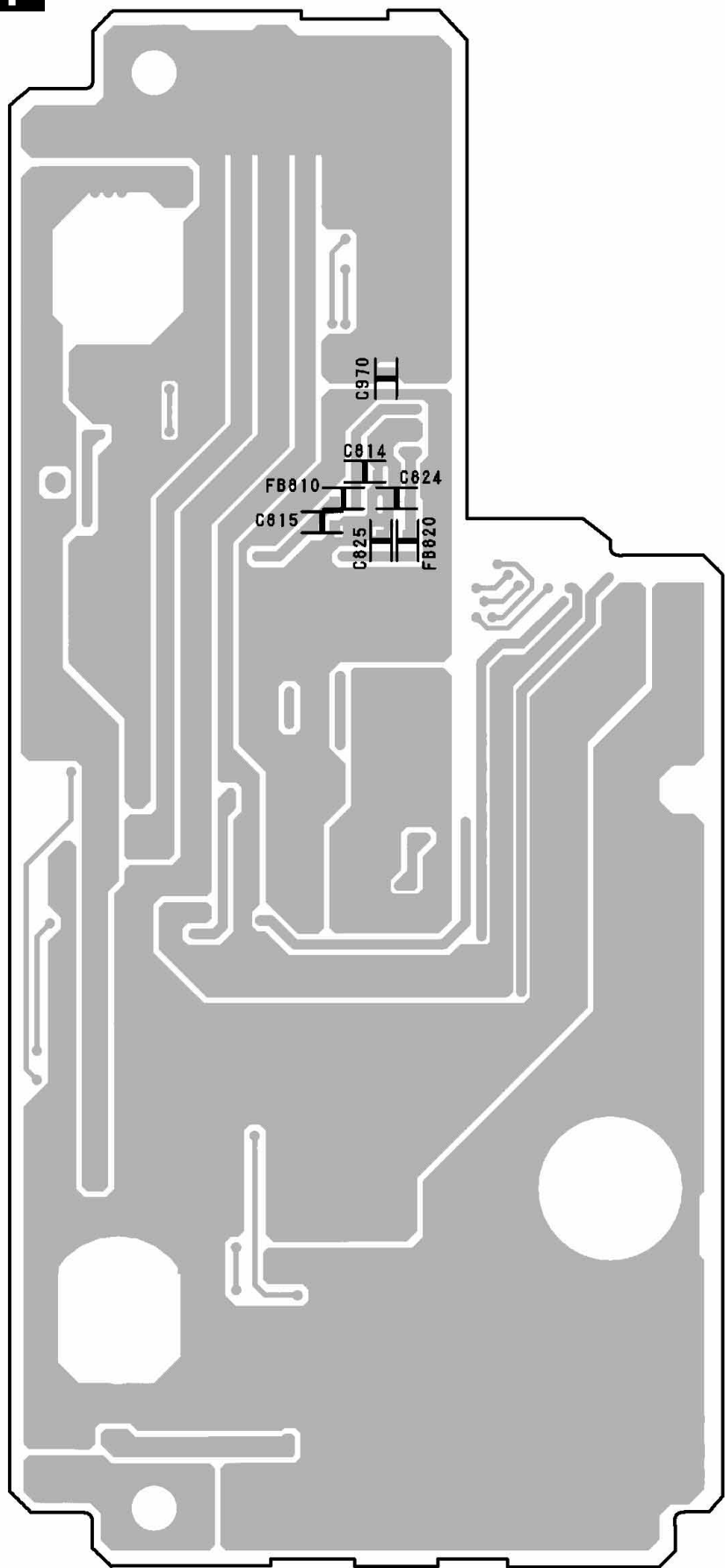
Q953

IC950

Q952

**F** POWER PCB ASSY

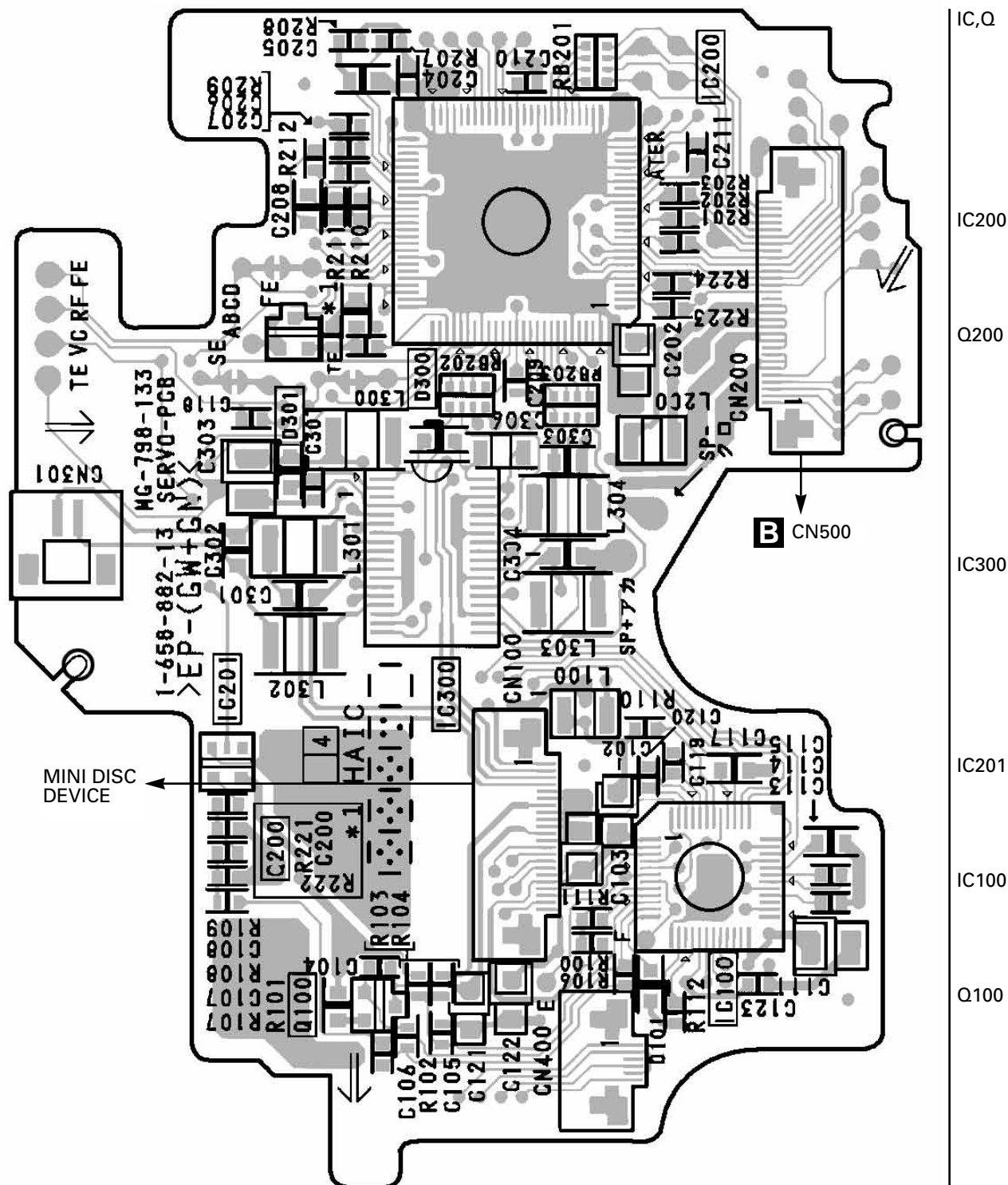
SIDE B



4.2 SERVO PCB ASSY

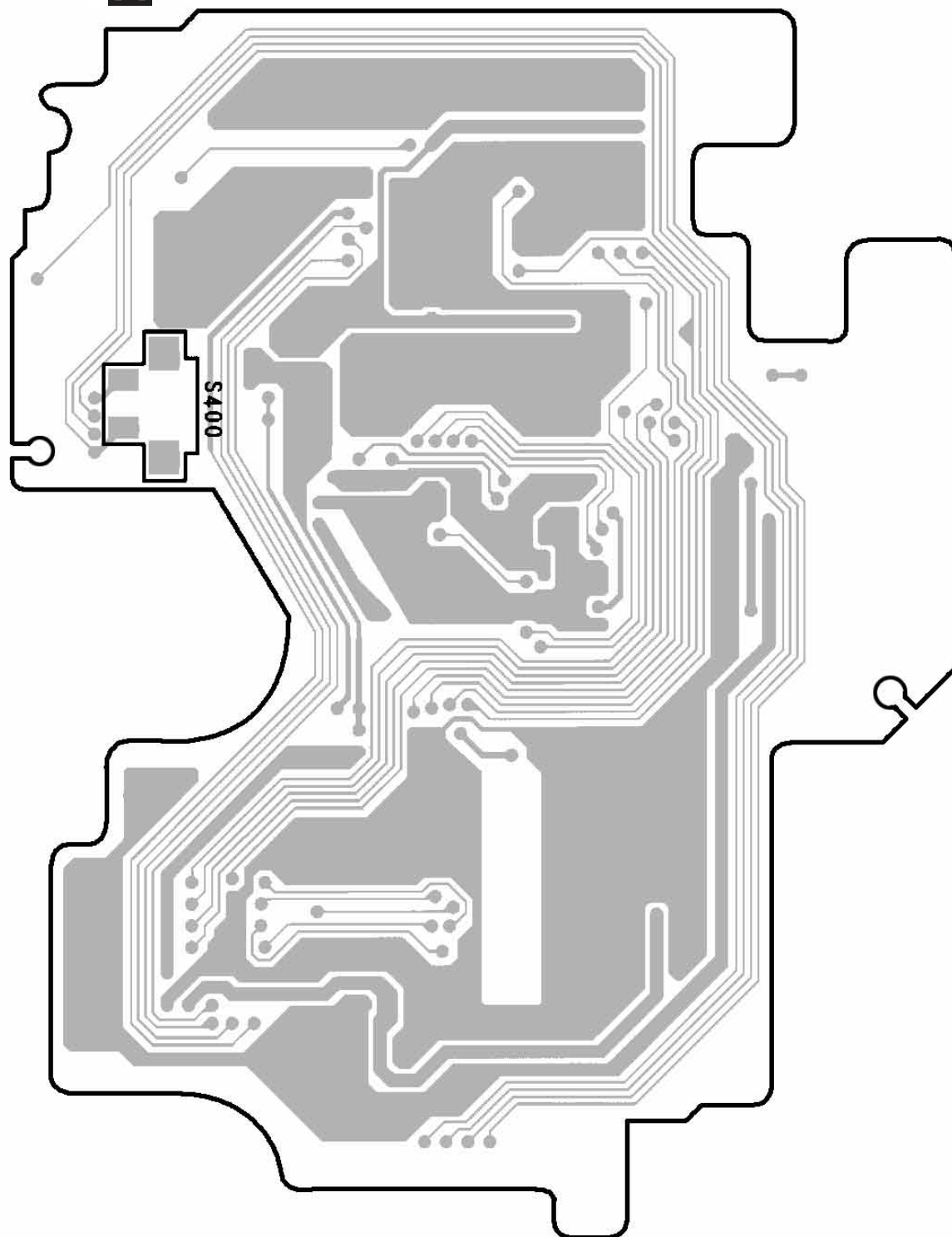
SIDE A

**A** SERVO PCB ASSY



SIDE B

**A** SERVO PCB ASSY







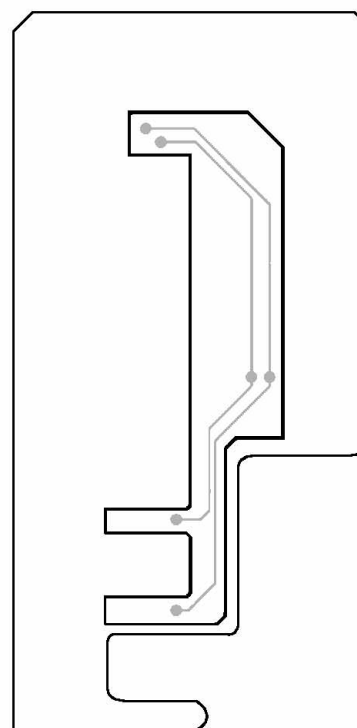
The diagram shows a detailed PCB layout for the Sensor Mount PCB. It includes various components such as resistors (R), capacitors (C), diodes (D), and integrated circuits (IC). The layout is organized into sections labeled IC\_Q, IC601, Q560, and Q561. Key components include:

- Resistors:** R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660.
- Capacitors:** C601, C602, C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C616, C617, C618, C619, C620, C621, C622, C623, C624, C625, C626, C627, C628, C629, C630, C631, C632, C633, C634, C635, C636, C637, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C652, C653, C654, C655, C656, C657, C658, C659, C660.
- Diodes:** D601, D602, D603, D604, D605, D606, D607, D608, D609, D610, D611, D612, D613, D614, D615, D616, D617, D618, D619, D620, D621, D622, D623, D624, D625, D626, D627, D628, D629, D630, D631, D632, D633, D634, D635, D636, D637, D638, D639, D640, D641, D642, D643, D644, D645, D646, D647, D648, D649, D650, D651, D652, D653, D654, D655, D656, D657, D658, D659, D660.
- Integrated Circuits:** IC601, IC602, IC603, IC604, IC605, IC606, IC607, IC608, IC609, IC610, IC611, IC612, IC613, IC614, IC615, IC616, IC617, IC618, IC619, IC620, IC621, IC622, IC623, IC624, IC625, IC626, IC627, IC628, IC629, IC630, IC631, IC632, IC633, IC634, IC635, IC636, IC637, IC638, IC639, IC640, IC641, IC642, IC643, IC644, IC645, IC646, IC647, IC648, IC649, IC650, IC651, IC652, IC653, IC654, IC655, IC656, IC657, IC658, IC659, IC660.

The layout also includes labels for specific components like RB601, RB602, RB603, RB604, RB605, RB606, RB607, RB608, RB609, RB610, RB611, RB612, RB613, RB614, RB615, RB616, RB617, RB618, RB619, RB620, RB621, RB622, RB623, RB624, RB625, RB626, RB627, RB628, RB629, RB630, RB631, RB632, RB633, RB634, RB635, RB636, RB637, RB638, RB639, RB640, RB641, RB642, RB643, RB644, RB645, RB646, RB647, RB648, RB649, RB650, RB651, RB652, RB653, RB654, RB655, RB656, RB657, RB658, RB659, RB660.

**C** LAMP MOUNT PCB

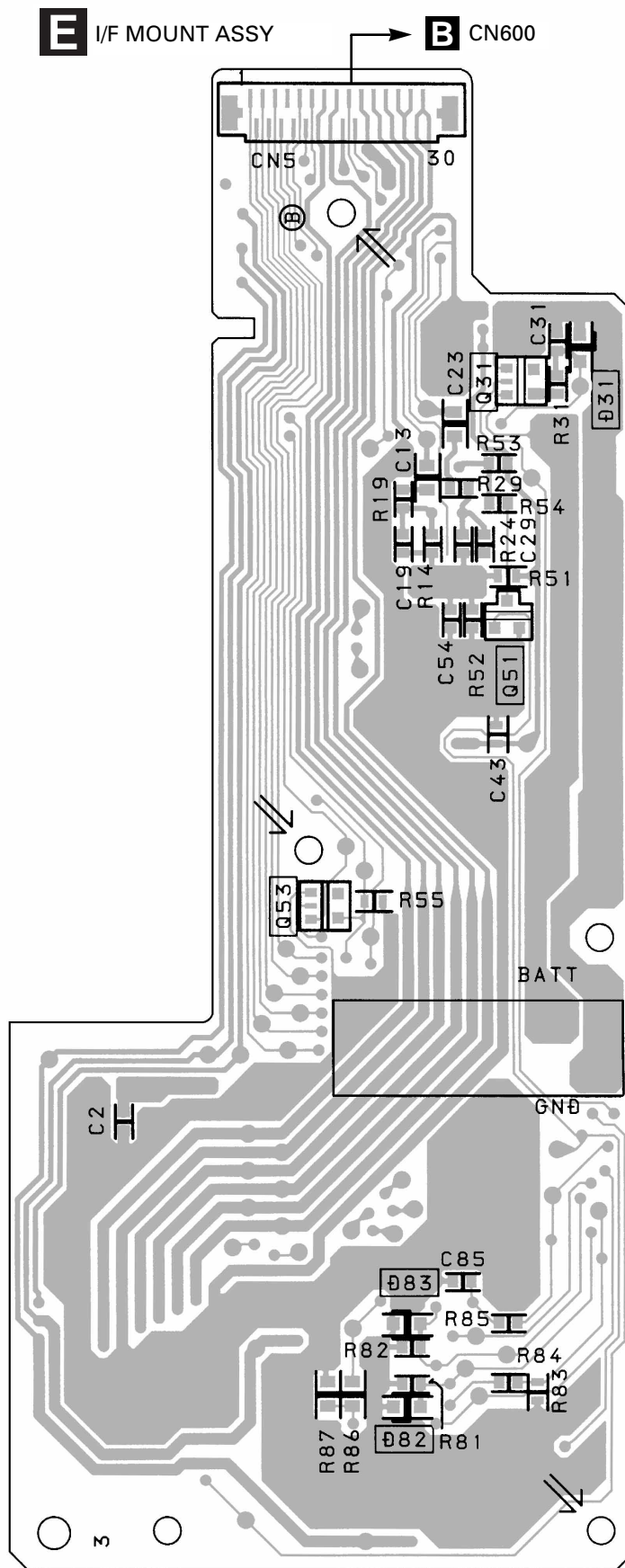
## D SENSOR MOUNT PCB



## 24



SIDE B



5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/OSOOOJ,RS1/OOSOOOJ



Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
<div><div>E</div><div>Unit Number : Unit Name : I/F Mount Assy</div></div>		R 72	RS1/16S104J
		R 73	RS1/16S101J
		R 74	RS1/16S104J
		R 75	RS1/16S101J
		R 76	RS1/16S101J
MISCELLANEOUS			
IC 41 IC	TA2050F		
IC 51 IC	BA3129F	R 77	RS1/16S101J
IC 71 IC	HA1287FP	R 78	RS1/16S473J
IC 81 IC	PD5403B	R 79	RS1/16S104J
Q 11 Transistor	DTC314TK	R 81	RS1/16S473J
		R 82	RS1/16S473J
Q 21 Transistor	DTC314TK		
Q 31 Transistor	XN1A312-TX	R 83	RS1/16S473J
Q 32 Transistor	2SD1664	R 84	RS1/16S102J
Q 51 Transistor	DTC124EK	R 85	RS1/16S222J
Q 52 Transistor	DTA144TKA	R 86	RS1/10S223J
		R 87	RS1/10S223J
Q 53 Transistor	FMC4A		
Q 71 Transistor	2SC2412K		
D 1 Diode	1SR154-400	CAPACITORS	
D 31 Diode	MA8075(M)	C 1	CZC5144
D 81 Diode	1SS355	C 2	CZC5142
		C 11	CZC5146
X 81 Radiator 6.29MHz	CZS3048	C 12	CZC5146
S 81 Keyboard Switch	CZS3046	C 13	CZC5143
CN 2 Connector	CZK3059		
CN 3 Connector	CZK3058	C 14	CZC5148
CN 4 Connector	CZK3058	C 15	CCSRCH361J50
		C 17	CZC5146
CN 5 Connector	CZK3064	C 19	CZC5167
CN 6 Connector	CZK3057	C 21	CZC5146
RESISTORS		C 22	CZC5146
R 11	RS1/16S181J	C 23	CZC5143
R 12	RS1/16S223J	C 24	CZC5148
R 13	RS1/16S102J	C 25	CCSRCH361J50
R 14	RS1/16S473J	C 27	CZC5146
R 15	RS1/16S473J		
		C 29	CZC5167
R 16	RS1/16S473J	C 31	CZC5142
R 17	RS1/16S821J	C 32	CZC5149
R 18	RS1/16S104J	C 41	CZC5148
R 19	RS1/16S123J	C 43	CZC5142
R 21	RS1/16S181J		
		C 52	CZC5145
R 22	RS1/16S223J	C 53	CZC5147
R 23	RS1/16S102J	C 54	CZC5142
R 24	RS1/16S473J	C 73	CZC5145
R 25	RS1/16S473J	C 81	CZC5148
R 26	RS1/16S473J		
		C 82	CZC5145
R 27	RS1/16S821J	C 83	CZC5166
R 28	RS1/16S104J	C 84	CZC5166
R 29	RS1/16S123J	C 85	CZC5142
R 31	RS1/16S222J		
R 51	RS1/16S222J	<div><div>A</div><div>Unit Number : CZW3054 Unit Name : Servo PCB Assy</div></div>	
		MISCELLANEOUS	
R 52	RS1/16S222J	IC 100 IC	CXA1981AR
R 53	RS1/16S104J	IC 200 IC	CXD2535CR-1
R 54	RS1/16S473J	IC 201 IC	SC7S04F
R 55	RS1/16S473J	IC 300 IC	MPC17A38VMEL
R 71	RS1/16S101J	Q 100 Transistor	2SA1037K

**B** Unit Number : CZW3057  
Unit Name : Main PCB

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 505	CZC5134	C 609	CCSRCH150J50
R 506	CZC5133	C 610	CZC5139
R 520	RS1/16S151J	C 611	CKSRYF224Z16
R 550	RS1/16S100J	C 620	CZC5139
R 551	RS1/16S101J	C 621	CZC5139
R 552	RS1/16S101J	C 650	CKSRYF224Z16
R 553	RS1/16S222J	C 651	CKSRYF224Z16
R 560	CZC5131	C 652	CKSRYF224Z16
R 561	CZC5132	C 653	CKSRYF224Z16
R 600	RS1/16S473J	C 700	CZC5129
R 601	RS1/16S104J	C 701	CZC5129
R 602	RS1/16S104J	<div>F</div> Unit Number : CZW3061 Unit Name : Power PCB Assy	
R 603	RS1/16S104J		
R 605	RS1/16S104J	MISCELLANEOUS	
R 607	CZC5126	IC 800	IC
R 608	RS1/16S102J	IC 900	IC
R 609	RS1/16S222J	IC 950	IC(TL1451ACDB-E20)
R 610	RS1/16S102J	Q 800	Transistor
R 611	RS1/16S222J	Q 810	Transistor
R 612	RS1/16S104J	Q 820	Transistor
R 613	RS1/16S102J	Q 910	Transistor
R 614	RS1/16S222J	Q 911	Transistor
R 615	RS1/16S102J	Q 920	Transistor
R 616	RS1/16S222J	Q 921	Transistor
R 617	RS1/16S104J	Q 931	Transistor
R 618	RS1/16S104J	Q 940	Transistor
R 619	RS1/16S103J	Q 941	Transistor
R 622	RS1/16S101J	Q 950	Transistor
R 624	RS1/16S102J	Q 952	Transistor
R 625	RS1/16S104J	Q 953	Transistor
R 626	RS1/16S104J	Q 954	Transistor
R 627	RS1/16S102J	D 900	Diode
R 628	RS1/16S104J	D 901	Diode
R 629	RS1/16S104J	D 902	Diode
R 630	RS1/16S473J	D 910	Diode
R 631	RS1/16S102J	D 911	Diode
R 632	RS1/16S102J	D 912	Diode
R 633	RS1/16S102J	D 920	Diode
CAPACITORS		D 921	Diode
C 500	CKSRYF224Z16	D 930	Diode
C 501	CZC5140	D 940	Diode
C 502	CCSRCH5R0C50	D 950	Diode
C 503	CKSRYB103K25	D 951	Diode
C 504	CCSRCH5R0C50	D 952	Diode
C 505	CKSRYF224Z16	L 950	Coil
C 506	CZC5130	L 951	Coil
C 507	CZC5129	L 952	Coil
C 508	CZC5129	L 953	Coil
C 509	CKSRYF224Z16	L 954	Coil
C 510	CZC5129	FB 810	Inductor
C 511	CCSRCH101J50	FB 820	Inductor
C 512	CKSRYF224Z16	NF 900	EMI Filter
C 513	CCSRCH101J50	PS 900	IC Link
C 520	CCSRCH680J50	CN 800	Connector
C 521	CZC5141	CN 900	Connector
C 550	CZC5128	RESISTORS	
C 551	CZC5129	R 800	RS1/10S222J
C 553	CCSRSL102J50	R 801	RS1/10S222J
C 554	CKSRYF224Z16	R 811	CZC5160
C 557	CKSQYB104K16	R 812	CZC5161
C 560	CZC5141	R 813	CZC5160
C 600	CZC5164	R 814	CZC5161
C 601	CKSRYF224Z16	R 815	CZC5159
C 602	CKSQYB224K16	R 816	CZC5162
C 603	CZC5139	R 821	CZC5160
C 604	CZC5139	R 822	CZC5161
C 605	CZC5129		
C 607	CCSRCH101J50		
C 608	CCSRCH150J50		

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 823	CZC5160	C 904	CZC5158
R 824	CZC5161	C 909	CKSQYB104K16
R 825	CZC5159	C 910	CKSQYB104K16
R 826	CZC5162	C 911	CZC5163
R 900	RS1/10S473J	C 920	CKSQYF105Z16
R 910	RS1/10S223J	C 931	CZC5151
R 911	RS1/10S102J	C 932	CKSQYB104K16
R 920	RS1/10S473J	C 940	CKSQYB104K16
R 921	RS1/10S333J	C 941	CZC5156
R 922	RS1/10S104J	C 942	CKSQYB104K16
R 930	RS1/10S222J	C 950	CCSQCH221J50
R 931	RS1/10S222J	C 951	CCSQCH102J50
R 940	RS1/10S102J	C 952	CCSQCH331J50
R 950	RS1/10S103J	C 953	CCSQCH102J50
R 951	RS1/10S472J	C 954	CCSQCH331J50
R 952	RS1/10S472J	C 955	CZC5154
R 953	RS1/10S562J	C 956	CZC5157
R 954	RS1/10S153J	C 957	CZC5157
R 955	RS1/10S153J	C 959	CZC5152
R 956	RS1/10S333J	C 960	CZC5157
R 957	RS1/10S333J	C 961	CZC5157
R 958	RS1/10S333J	C 962	CKSQYB104K16
R 959	RS1/10S333J	C 963	CKSQYB104K16
R 960	RS1/10S101J	C 970	CCSQCH102J50
R 961	RS1/10S681J	C 989	CKSQYB104K16
R 962	RS1/10S681J	 Unit Number : Unit Name : Lamp Mount PCB	
R 963 (RN1/10SE1002D)	GGC1320		
R 964 (RN1/10SE3301D)	GGC1353	MISCELLANEOUS	
R 965	RS1/10S101J	S 620 Push Switch	CZS3047
R 966	RS1/10S101J	PL 620 Pilot Lamp	CZE3030
R 967	RS1/10S681J	CN 620 Connector Pin	CZK3063
R 968	RS1/10S681J		
R 969	RN1/10SE1002D	RESISTORS	
R 970	RN1/10SE3301D	R 620	RS1/10S2R2J
CAPACITORS		 Unit Number : Unit Name : Sensor Mount PCB	
C 415	CCSQCH221J50		
C 800	CZC5154	S 611 Push Switch	CZS3042
C 801	CKSQYB104K16	S 612 Push Switch	CZS3042
C 803	CKSQYB104K16	S 613 Push Switch	CZS3042
C 805	CZC5153	S 614 Push Switch	CZS3042
C 810	CZC5155	S 615 Push Switch	CZS3042
C 811	CCSQCH101J50		
C 812	CZC5156	S 616 Push Switch	CZS3042
C 813	CZC5155	CN 610 Connector	CZK3049
C 814	CCSQCH221J50		
C 820	CZC5155	Miscellaneous Parts List	
C 821	CCSQCH101J50	SL Motor Assy	CZX3020
C 822	CZC5156	SP Motor	CZX3019
C 823	CZC5155	Slide Variable resistor	CZC5118
C 824	CCSQCH221J50	Switch	CZS3040
C 825	CCSQCH221J50	Switch	CZS3038
C 900	CKSQYB472K50		
C 901	CKSQYB104K16	Switch	CZS3039
C 902	CCSQCH102J50	Mini Disc Device	CZG3005
C 903	CZC5154	LD Motor Assy	CZX3076
		ELV Motor Assy	CZX3077

## 6. ADJUSTMENT

There is no information to be shown in this chapter.

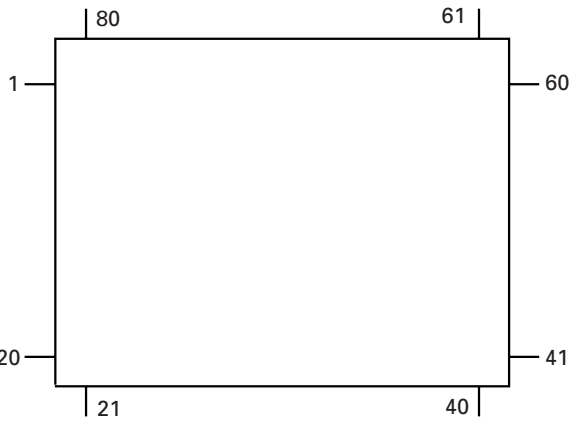
7. GENERAL INFORMATION

7.1 IC

● Pin Functions(PD5403B)

Pin No.	Pin Name	I/O	Function and Operation
1	NC		OPEN
2	SYSRST	O	System reset output for MD(Not used)
3	CSI	I	IP-BUS data input
4	CSO	O	IP-BUS data output
5	APPW	O	IP-BUS driver power supply control
6	BUSON	O	Unilink BUS ON control output
7	UNICLK	O	Unilink SCK output
8	UNISO	O	Unilink DATA output
9	UNISI	I	Unilink DATA input
10-13	NC		OPEN
14	ASENS	I	Acc sense input
15	BSENS	I	Back Up sense input
16-22	NC		OPEN
23	UNISINT	I	Unilink DATA interrupt input
24	GND	I	GND
25	RESET	I	Reset input
26, 27	NC		OPEN
28	XIN	I	Crystal oscillator connection pin
29	XOUT	O	Crystal oscillator connection pin
30	VSS		GND
31-59	NC		OPEN
60	SYSPW	O	Power supply control output of analog SW
61	SELECT	O	IP-BUS audio line select control output
62	SYSMUTE	O	System mute output
63-70	NC		OPEN
71	VCC		VDD(Back Up +5V)
72	VREF	I	Reference voltage input for A/D
73	AVSS	I	GND for A/D
74-80	NC		OPEN

\*PD5403B

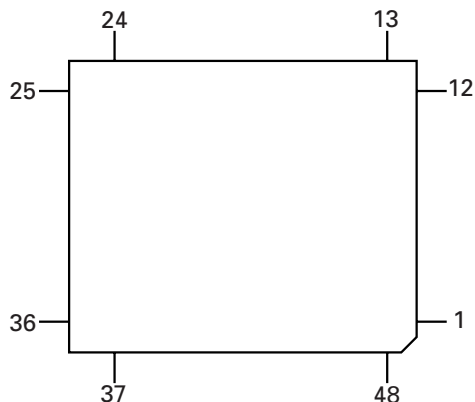


IC's marked by\* are MOS type.  
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

# **● Pin Functions(CXA1981AR)**

Pin No.	Pin Name	I/O	Function and Operation
1	VC	O	Output terminal for the center point voltage (1/2 VCC) generated
2-7	A-F	I	Signal input from detector circuit in the optical pick-up block
8	FI	I	Signal input of the operational amplifier for F signal
9	FO	O	Signal output of the operational amplifier for F signal
10	PD	I	Front monitor Connected to the photo diode
11	APCREF	I	Input terminal for the setting of laser power
12	TEMPI	I	Terminal for the connection to temperature sensor Not used this set (OPEN)
13	GND		Ground terminal
14	AAPC	O	LD amplifier output terminal of APC circuit
15	DAPC	O	Not used (OPEN)
16	TEMPR	O	Output terminal of the reference voltage for temperature sensor Not used this set (OPEN)
17	$\overline{\text{X}}\text{RST}$	I	Reset signal input from the system controller (IC600) When reset : "L"
18	SWDT	I	Write data signal input from the system controller (IC600)
19	SCLK	I	Clock signal input from the system controller (IC600)
20	XLAT	I	Latch signal input from the system controller (IC600)
21	VREF	O	Reference voltage output Not used this set (OPEN)
22	TENV	O	Not used (OPEN)
23	THLD	I	Not used (OPEN)
24	VCC		Power supply terminal (+3.3V)
25	TFIL	I	Not used (OPEN)
26	TE	O	Tracking error signal output to CXD2535CR (IC200)
27	TLB	I	Input terminal of the adder signal to tracking error Not used this set (OPEN)
28	CSLED	I	Terminal for the sled error lowpass filter
29	SE	O	Sled error signal output to CXD2535CR (IC200)
30	ADFM	O	FM signal output terminal of the ADIP
31	ADIN	I	Input terminal by AC coupling is FM signal of the ADIP
32	ADAGC	I	External capacitor connect terminal for AGC of the ADIP
33	ADFG	O	ADIP double turned FM signal output to CXD2535CR (IC200) (22.05kHz $\pm$ 1kHz)
34	AUX	O	Sub signal output to CXD2535CR (IC200)
35	FE	O	Focus error signal output to CXD2535CR (IC200)
36	FLB	I	Input terminal of the adder signal to focus error Not used this set (OPEN)
37	ABCD	O	Light amount signal output to CXD2535CR (IC200)
38	BOTM	O	Light amount bottom hold signal output to CXD2535CR (IC200)
39	PEAK	O	Light amount peak hold signal output to CXD2535CR (IC200)
40	PFAGC	I	External capacitor connect terminal of AGC circuit for the RF
41	RF	O	Playback EFM RF signal output to CXD2535CR (IC200)
42	ISSET	I	Setting terminal for the internal circuit constant 22kHz,BPF center frequency
43	AGCI	I	Input terminal by AC coupling is RF signal
44	RFO	O	RF signal output terminal
45	MORFI	I	Input terminal by AC coupling is RF signal of the MO
46	MORFO	O	RF signal output terminal of the MO
47,48	I,J	I	Signal input from detector circuit in the optical pick-up block

CXA1981AR



## ● Pin Functions(CXD2535CR-1)

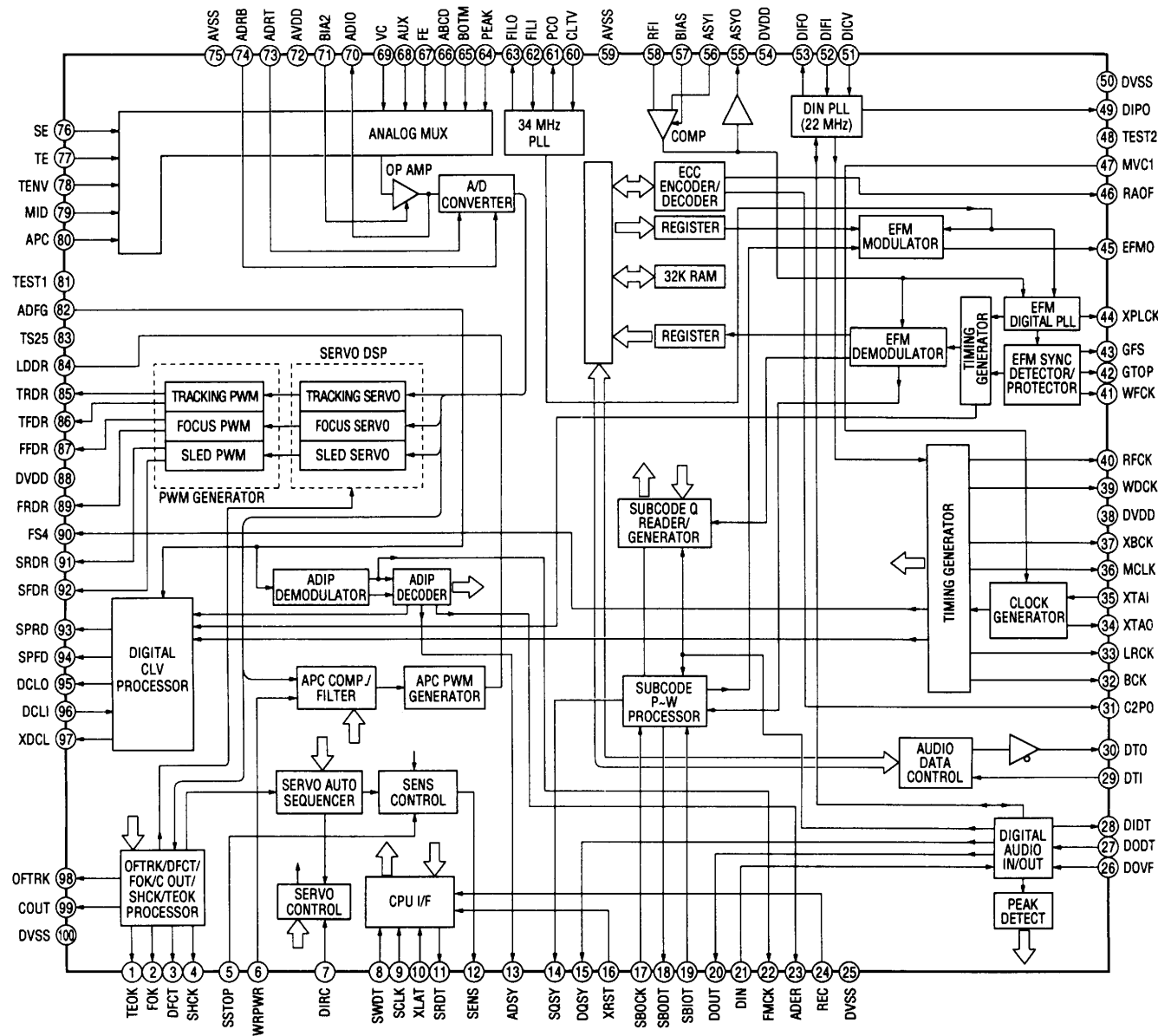
Pin No.	Pin Name	I/O	Function and Operation
1	FS256	O	11.2896MHz clock signal output (MCLK system) Not used this set (OPEN)
2	FOK	O	Focus OK signal output to the system controller (IC600) "H" is output when the focus is applied
3	DFCT	O	Defect ON/OFF selection signal output to CXD2536CR (IC500)
4	SHCK	O	Track jump detection signal output to the system controller Not used this set (OPEN)
5	SHCKEN	I	Track jump detection enable input Not used this set (Fixed at "L")
6	WRPWR	I	Laser power selection signal input from the system controller Not used this set (Fixed at "L")
7	DIRC	I	Not used this set (Fixed at "H")
8	SWDT	I	Write data signal input from the system controller (IC600)
9	SCLK	I	Serial clock signal input from the system controller (IC600)
10	XLAT	I	Serial latch signal input from the system controller (IC600)
11	SRDT	O	Read data signal output to the system controller (IC600)
12	SENS	O	Internal status (SENS) output to the system controller (IC600)
13	ADSY	O	ADIP sync signal output Not used this set (OPEN)
14	SQSY	O	Sub-code Q sync (SCOR) output to the system controller (IC600) "L" every 13.3msec, Almost "H"
15	DQSY	O	Digital in U-bit CD format sub-code Q sync (SCOR) output to the system controller (IC600) "L" every 13.3msec, Almost "H"
16	XRST	I	Reset signal input from the system controller (IC600) When reset "L"
17	TEST4	I	Test input terminal (Fixed at "L")
18	CLVSK	O	Not used this set (OPEN)
19	TEST5	I	Test input terminal (Fixed at "L")
20	DOUT	O	Output terminal of the digital audio signal (for optical out) Not used this set (OPEN)
21	DIN	I	Input terminal of the digital audio signal (for optical out) Not used this set (Fixed at "L")
22	FMCK	O	FM modulation clock signal output of the ADIP Not used this set (OPEN)
23	ATER	O	ADIP CRC flag output When error "H" Not used this set (OPEN)
24	REC	I	Record/playback selection signal input When recording : "H", when playback: "L" (Fixed at "L")
25	DVSS		Ground terminal (Digital system)
26	DOVF	I	Validity flag input terminal for the digital audio out Not used this set (Fixed at "L")
27	DODT	I	Input terminal of 16-bit data signal for the digital audio out Not used this set (Fixed at "L")
28	DIDT	O	Output terminal of 16-bit data signal for the digital audio in Not used this set (OPEN)
29	DTI	I	Record audio data signal input from CXD2536CR (IC500)
30	DTO	O	Playback audio data signal output to CXD2536CR (IC500)
31	C2PO	O	C2PO (indicate the error state of the data) signal output to CXD2536AR (IC500) Playback: C2PO ("H"), Digital recording: D.In-Vflag, Analog recording: "L"
32	BCK	O	Bit clock (2.8224MHz) signal output to CXD2536CR (IC500) (MCLK system)
33	LRCK	O	L/R clock (44.1kHz) signal output to CXD2536CR (IC500) (MCLK system)
34	XTAO	O	System clock (512Fs=22.5792MHz) signal output Not used this set (OPEN)
35	XTAI	I	System clock (512Fs=22.5792MHz) signal input from CXD2536CR (IC500)
36	MCLK	O	MCLK clock (22.5792MHz) signal output Not used this set (OPEN)
37	XBCK	O	BCK (pin 32) inverted output Not used this set (OPEN)
38	DVDDO		Power supply terminal (+3.3V) (Digital system)
39	WDCK	O	WDCK clock (88.2kHz) signal output (MCLK system) Not used this set (OPEN)
40	RFCK	O	RFCK clock (7.35kHz) signal output (MCLK system) Not used this set (OPEN)
41	WFCK	O	WFCK clock (7.35kHz) signal output (When playback: EFM decoder PLL system, When recoding: EFM encoder PLL system) Not used this set (OPEN)
42	GTOP	O	Opens the playback EFM frame sync protection window when "H" Not used set (OPEN)
43	GFS	O	The playback EFM frame sync and interpolation protection timing match when "H" Not used this set (OPEN)
44	XPLCK	O	EFM decoder PLL clock (98Fs=4.3218MHz) signal output Falling edge of the EFM PLL clock and the EFM signal match Not used this set (OPEN)



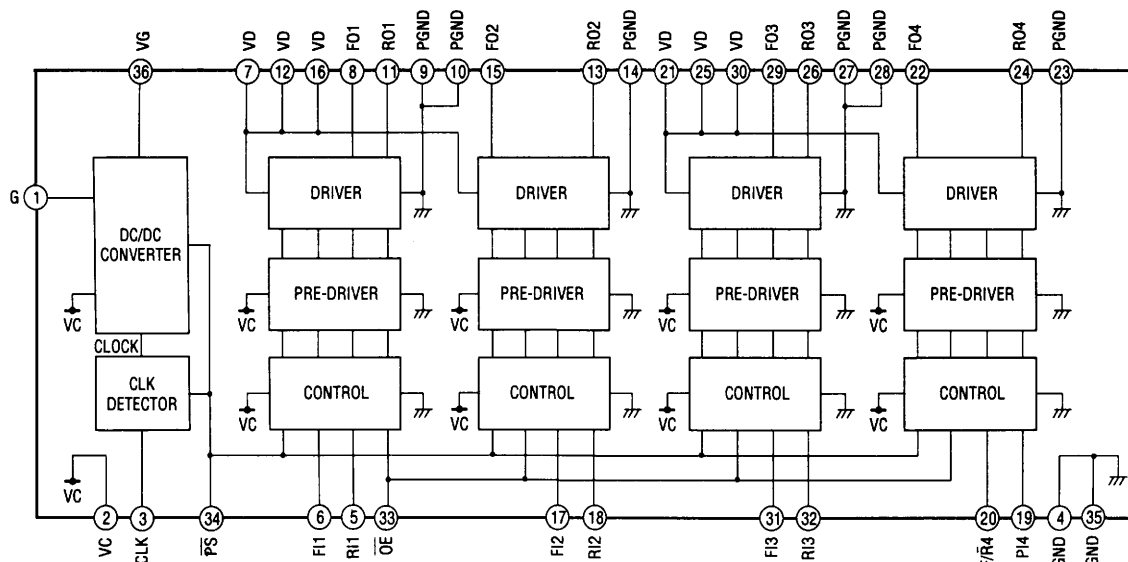
Pin No.	Pin Name	I/O	Function and Operation
45	EFMO	O	FM signal output (When recoding) Not used this set (OPEN)
46	RAOF	O	Overflow detection signal output of the internal RAM (Decoder monitor out) RAOF is signal generated when the 32k RAM exceeds the $\pm 4F$ jitter margin Not used this set (OPEN)
47	MVCI	I	Oscillation input for PLL of the digital in Not used this set (Fixed at "L")
48	TEST2	I	Test terminal input (Fixed at "L")
49	DIPD	O	Phase comparator output for PLL of the digital in When the internal VCO:Frequency;Low→"H" When the external VCO:Frequency;Low→"L" Not used this set (OPEN)
50	DVSS1		Ground terminal (Digital system)
51	DICV	I	Control voltage input terminal of the internal VCO for digital in PLL
52	DIFI	I	Filter input terminal of the internal VCO for digital in PLL Not used this set (Fixed at "L")
53	DIFO	O	Filter output terminal of the internal VCO for digital in PLL Not used this set (OPEN)
54	AVDD1		Power supply terminal (+3.3V) (Analog system)
55	ASYO	O	Playback EFM full-swing output (L=VSS,H=VDD)
56	ASYI	I	Playback EFM asymmetry compare voltage input terminal
57	BIAS	I	Playback EFM asymmetry circuit constant current input terminal
58	RFI	I	Playback EFM RF signal input from CXA1981AR (IC100)
59	AVSS1		Ground terminal (Analog system)
60	CLTV	I	VCO control voltage input terminal of the PLL for decoder PLL master clock
61	PCO	O	Phase comparator output terminal of the PLL for decoder PLL master clock
62	FILI	I	Filter input terminal of the PLL for decoder PLL master clock
63	FILO	O	Filter output terminal of the PLL for decoder PLL master clock
64	PEAK	I	Light amount peak hold signal input from CXA1981AR (IC100)
65	BOTM	I	Light amount bottom hold signal input from CXA1981AR (IC100)
66	ABCD	I	Light amount signal input from CXA1981AR (IC100)
67	FE	I	Focus error signal input from CXA1981AR (IC100)
68	AUX1	I	Sub signal input from CXA1981AR (IC100)
69	VC	I	Center point voltage (1/2 VCC) input from CXA1981AR (IC100)
70	ADIO	O	Monitor output of the A/D converter input signal Not used this set (OPEN)
71	TEST3	I	Test input terminal (Fixed at "L")
72	AVDD2		Power supply terminal (+3.3V) (Analog system)
73	ADRT	I	A/D converter action limits (upper side) voltage input (Fixed at "H")
74	ADRB	I	A/D converter action limits (lower side) voltage input (Fixed at "L")
75	AVSS2		Ground terminal (Analog system)
76	SE	I	Sled error signal input from CXA1981AR (IC100)
77	TE	I	Tracking error signal input from CXA1981AR (IC100)
78	AUX2	I	Sub signal input terminal from CXA1981AR (IC100)
79	DCHG	I	Connected to the Ground
80	APC	I	Input terminal for the laser APC Not used this set (Fixed at "L")
81	TEST1	I	Test input terminal (Fixed at "L")
82	ADFG	I	ADIP double turned FM signal input from CXA1981AR (IC100) (22.05kHz $\pm$ 1kHz) (TTL schmitt input)
83	TS25	I	Test input terminal (Fixed at "L")
84	LDDR	O	Laser APC signal output to CXA1981AR (IC100)
85	TRDR	O	Tracking servo drive signal output (-)
86	TFDR	O	Tracking servo drive signal output (+)
87	FFDR	O	Focus servo drive signal output (+)
88	DVDD1		Power supply terminal (+3.3V) (Digital system)
89	FRDR	O	Focus servo drive signal output (-)
90	FS4	O	176.4kHz clock signal output (MCLK system) Not used this set (OPEN)
91	SRDR	O	Sled servo drive signal output (+)
92	SFDR	O	Sled servo drive signal output (-)
93	SPRD	O	Spindle servo drive signal output (+)
94	SPFD	O	Spindle servo drive signal output (-)
95	DCLO	O	Not used (OPEN)

Pin No.	Pin Name	I/O	Function and Operation
96	DCLI	I	Not used (Fixed at "H")
97	XDCL	O	Not used (OPEN)
98	OFTRK	O	Offtrack signal output Not used this set (OPEN)
99	COUT	O	Traverse count signal output Not used this set (OPEN)
100	DVSS2		Ground terminal (Digital system)

CXD2535CR-1



MPC17A38VMEL



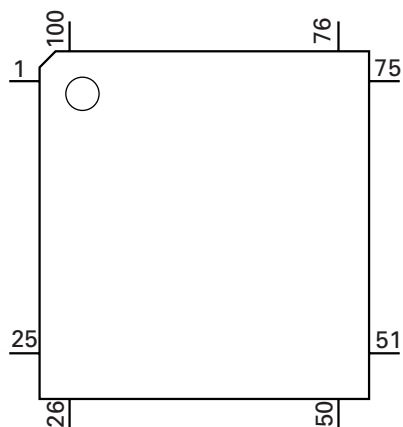
### ● Pin Functions(CXD2536R)

Pin No.	Pin Name	I/O	Function and Operation
1	VDD		Power supply terminal (+3.3V)
2	SWDT	I	Write data signal input from the system controller (IC600)
3	SCK	I	Serial clock signal input from the system controller (IC600)
4	XLAT	I	Serial latch signal input from the system controller (IC600)
5	SRDT	O	Read data signal output to the system controller (IC600)
6	SENSE	O	Internal status (SENSE) output to the system controller (IC600)
7	SMDO	I	Serial command control mode input from the system controller (Fixed at "H")
8	SMDI	I	Serial command control mode input from the system controller (Fixed at "H")
9	XINT	O	Interruption status output to the system controller (IC600)
10	RCPB	I	Record/playback selection signal input (Fixed at "L")
11	WRMN	I	Write/monitor mode selection signal input from the system controller (Fixed at "L")
12	TX	I	Writing data transmission timing input from the system controller Used together with the magnetic field head ON/OFF output (Fixed at "L")
13	VSS		Ground terminal
14	SICK	I	Chip reserve terminal (Fixed at "H")
15	IDSL	I	Chip reserve terminal (Fixed at "H")
16	XILT	I	Chip reserve terminal (Fixed at "H")
17	XRST	I	Reset signal input from the system controller (IC600) When reset: "L"
18-21	TS0-TS3	I	Test input terminal (Fixed at "L")
22	EXIR	I	Chip reserve terminal (Fixed at "H")
23	SASL	I	Single use the block selection "L":ATRAC,"H":RAM controller (Fixed at "L")
24	SGL	I	Normally fixed at "L",Fixed at "H" when the ATRAC or RAM controller is single used (Fixed at "L")
25	VSS		Ground terminal
26	AIRCPB	O	Record/playback mode signal output terminal of the ATRAC or external audio block Not used this set (OPEN)
27	XRQ	I/O	XRQ signal input/output terminal of the ATRAC interface Not used this set (OPEN)
28	ADTO	I/O	Decoder data signal input/output terminal of the ATRAC Not used this set (OPEN)
29	ADTI	I/O	Encoder data signal input/output terminal of the ATRAC Not used this set (OPEN)
30	XALT	I/O	Data ready and XALT signal input/output terminal of the ATRAC interface Not used this set (OPEN)

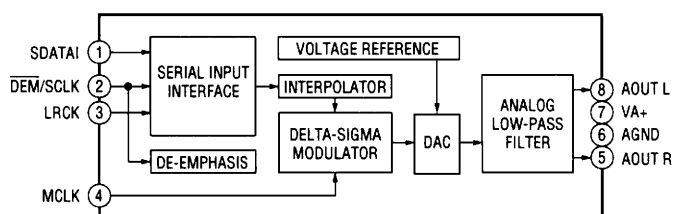
Pin No.	Pin Name	I/O	Function and Operation
31	ACK	I/O	ACK signal input/output terminal of the ATRAC interface Not used this set (OPEN)
32	AC2	I/O	Error data signal input/output terminal of the ATRAC interface Not used this set (OPEN)
33	LCHST	I/O	Lch Start data signal input/output terminal of the ATRAC interface Not used this set (OPEN)
34	EXE	I/O	EXE signal input/output terminal of the ATRAC interface Not used this set (OPEN)
35	MUTE	I/O	MUTE signal input/output terminal of the ATRAC interface Not used this set (OPEN)
36	OSCO	O	45.1584MHz clock oscillation output
37	OSCI	I	45.1584MHz clock oscillation input
38	VSS		Ground terminal
39	ATT	I/O	ATT signal input/output terminal of the ATRAC interface Not used this set (OPEN)
40	F86	O	11.6msec timing signal output terminal of the ATRAC block Not used this set (OPEN)
41	DOUT	O	Monitor/audio decode data signal output to the D/A converter (IC550)
42	ADIN	I	Recording data signal input Not used this set (Fixed at "L")
43	ABCK	O	Bit clock signal output Not used this set (OPEN)
44	ALRCK	O	L/R clock signal output to the D/A converter (IC550)
45-47	SA2-SA0	O	Address signal output Not used this set (OPEN)
48,49	A11,A10	O	Address signal output Not used this set (OPEN)
50	VSS		Ground terminal
51	VDD		Power supply terminal (+3.3V)
52-55	A03-A00	O	Address signal output to the RAM (IC501)
56-60	A04-A08	O	Address signal output to the RAM (IC501)
61	XOE	O	Output enable control signal output to the RAM (IC501)
62	XCAS	O	Column address strobe signal output to the RAM (IC501)
63	VSS		Ground terminal
64	XCS	O	Chip select signal output Not used this set (OPEN)
65	A09	O	Address signal output to the RAM (IC501)
66	XRAS	O	Row address strobe signal output to the RAM (IC501)
67	XWE	O	Reading/Writing control signal output to the RAM (IC501)
68,69	D1,D0	I/O	RAM (IC501) data bus
70,71	D2,D3	I/O	RAM (IC501) data bus
72-74	D4-D6	I/O	Data bus Not used this set (OPEN)
75	VSS		Ground terminal
76	D7	I/O	Data bus Not used this set (OPEN)
77	ERR	I/O	Input/output terminal of the error (C2PO) data signal to the external RAM Not used this set (OPEN)
78	EXTC2R	I	External RAM selection signal input for the error data writing ( When "H":External RAM) (Fixed at "L")
79	BUSY	O	BUSY signal output of the RAM access Not used this set (OPEN)
80	EMP	O	Empty or before the full of the ATRAC data (When DSC=ASC+1:"H") Not used this set (OPEN)
81	FUL	O	Full or before the empty of the ATRAC data (When ASC=DSC+1:"H") Not used this set (OPEN)
82	EQL	O	Empty of the ATRAC data (When DSC=ASC:"H")
83	MDLK	O	Indicate the main/sub of the recording or playback data (When sub and linking:"H", When the main:"L") Not used this set (OPEN)
84	CPSY	O	Interpolation sync signal output Not used this set (OPEN)
85	CTMD0	O	DSC (Difference Signal Control) counter mode output Not used this set (OPEN)
86	CTMD1	O	DSC (Difference Signal Control) counter mode output Not used this set (OPEN)
87	SPO	O	System clock (512Fs=22.5792MHz) signal output to CXD2535CR (IC200) and D/A converter (IC550)
88	VSS		Ground terminal
89	MDSY	O	Sync detection signal output of the main data Not used this set (OPEN)
90	LRCK	I	L/R clock (44.1kHz) signal input from CXD2535CR (IC200)

Pin No.	Pin Name	I/O	Function and Operation
91	BCK	I	Bit clock (2.8224MHz) signal input from CXD2535CR (IC200)
92	C2PO	I	C2PO (indicate the error mode of the data) signal input from CXD2535BR (IC200) When playback:C2PO ("H"), When digital recording:D.IN-Vflag, When analog recording:"L"
93	DATA	I/O	When recording:Record audio data signal output (Not used this set) When playback:Playback audio data signal input from CXD2535CR (IC200)
94	DIDT	I	16-bit data input terminal for the digital audio in Not used this set (Fixed at "L")
95	DODT	O	16-bit data output terminal for the digital audio out Not used this set (OPEN)
96	DIRCPB	O	Disc drive,Record or playback mode output of the EFM encoder/decoder Not used this set (OPEN)
97	MIN	I	Defect ON/OFF selection signal input from CXD2535CR (IC200)
98	SPOSL	I	IN/OUT selection input terminal of the pin 87 ("L":IN,"H":OUT) (Fixed at "H")
99	MCK	O	Internal master clock signal output terminal of the RAM controller
100	VSS		Ground terminal

CXD2536R



CS4330E-CSR

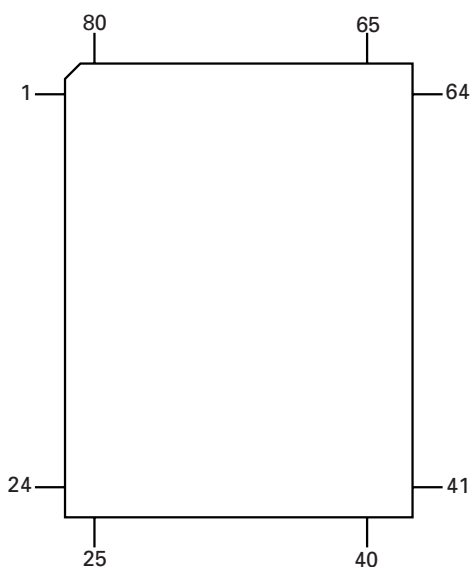


● Pin Functions(CXP84340-090Q)

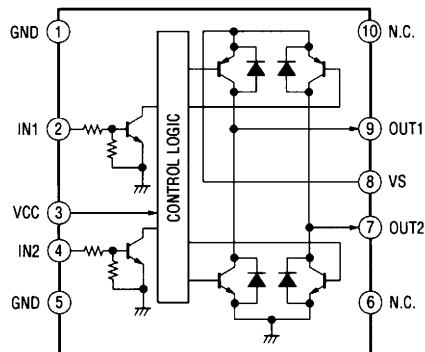
Pin No.	Pin Name	I/O	Function and Operation
1-5	T13-T17	I	Test key (4 × 8 matrix) signal output terminal (Fixed at "L")
6	M1	O	Elevator motor (M904) drive signal output (UP) *1
7	M1	O	Elevator motor (M904) drive signal output (DOWN) *1
8	M2	O	Loading motor (M903) drive signal output *2
9	M2	O	Loading motor (M903) drive signal output *2
10	MDMON	O	Power control output (Mechanism deck system) Power ON:"H"
11	LES	I	Detection signal input from the loading end sensor switch (S902)
12	SES	I	Detection signal input from the store end sensor switch (S903)
13	HOME	I	Detection signal input from the home position switch (S901) Home position:"L"
14	DCS1	I	Detection signal input from the disc1 switch (S611) No disc "L"
15	DCS2	I	Detection signal input from the disc2 switch (S612) No disc "L"
16	DCS3	I	Detection signal input from the disc3 switch (S613) No disc "L"
17	DCS4	I	Detection signal input from the disc4 switch (S614) No disc "L"
18	DCS5	I	Detection signal input from the disc5 switch (S615) No disc "L"
19	DCS6	I	Detection signal input from the disc6 switch (S616) No disc "L"
20	CH/SINGLE	I	Changer/single setting up terminal When used the changer:"H" (Fixed at"H")
21	ILLON	O	Lamp (PL620) drive signal output for illumination When lamp is ON:"H"
22-29	N.C.	O	Not used (OPEN)
30	RST	I	System reset signal input When reset:"L"
31	EXTAL	I	10MHz system clock signal input
32	XTAL	O	10MHz system clock signal output
33	VSS	-	Ground terminal
34	TX	O	32.768kHz clock signal output for a clock
35	TEX	I	32.768kHz clock signal input for a clock
36	AVSS	-	Ground terminal (Analog system)
37	AVREF	-	Reference voltage (+5V) input for the A/D converter
38	INIT	I	Initial reset signal input (Normally:"H")
39	TEMP	I	Temperature detection signal input
40	EHS	I	Disc high position detection signal input
41	N.C.	O	Not used (OPEN)
42	EE-CS	O	Chip select signal output for a EEPROM Not used this set (OPEN)
43	EE-CKO	O	Serial clock signal output for a EEPROM Not used this set (OPEN)
44	EE-SIO	I/O	Data signal input/output for a EEPROM Not used this set (OPEN)
45	MD-SO	O	Write data signal output to RF AMP (IC100), CXD2535CR(IC200) and CXD2536CR (IC500)
46	LNKOFF	O	LINK OFF signal output for serial communications Not used this set (OPEN)
47	UNIREQ	O	Request signal output for serial communications Not used this set (OPEN)
48	UNICKI	I	Clock signal (serial communications) input
49	UNISI	I	Data signal (serial communications) input
50	UNISO	O	Data signal (serial communications) output
51	MD-CKO	O	Serial clock signal output to RF AMP (IC100), CXD2535CR (IC200) and CXD2536CR (IC500)
52	MD-SI	I	Read data signal input from CXD2535CR (IC200) and CXD2536CR (IC500)
53	N.C.	O	Not used
54	SENS	I	Internal status (SENS) input from CXD2535CR (IC200) and CXD2536CR (IC500)
55	CC-XINT	I	Interruption status input from CXD2536CR (IC500)
56	LIMIT-SW	I	Detection signal input from the limit switch (S400) When sled limit in:"L"
57	DOOR-SW	I	Detection signal input from the door open/close switch (S620) When open:"L"
58	MD-LAT	O	Serial latch signal output to RF AMP (IC100), CXD2535CR (IC200) and CXD2536CR (IC500)
59	MD-RST	O	Reset signal output to RF AMP (IC100), CXD2535CR (IC200) and CXD2536CR (IC500) When reset "L"
60	BU-IN	I	Battery detection signal input
61	BUS-ON	I	BUS-ON detection signal (serial communications) input BUS ON:"L"
62	SQSY	I	Sub-code Q sync (SCOR) input from CXD2535CR (IC200) "L" every 13.3msec, Almost "H"
63	STR-SW	I	Detection signal input from the STOP switch (S600)
64	FOK	I	Focus OK signal input from CXD2435CR (IC200) "H" is input when the focus is applied
65	MD-ON	O	Power control signal output (Servo system) Power ON : "H"

Pin No.	Pin Name	I/O	Function and Operation
66	EMPH-O	O	Deemphasis control signal output to the D/A converter (IC550) Deemphasis ON "L"
67	A-MUT	O	Audio mute signal output When mute : "H"
68	N.C.		Not used (OPEN)
69	CLOCK	O	Clock signal output for test mode indication Not used this set (OPEN)
70	DATA	O	Data signal output for test mode indication Not used this set (OPEN)
71	TM-ON/OFF	I	Test mode set up terminal Normolly : "H" When test mode : "L"
72	VDD		Power supply terminal (+5V)
73	N.C.		Not used (Fixed at "H")
74	TO0	O	Test key (4×8 matrix) signal output terminal (OPEN)
75	TO1	O	Test key (4×8 matrix) signal output terminal (OPEN)
76	TO2	O	Test key (4×8 matrix) signal output terminal (OPEN)
77	TO3	O	Test key (4×8 matrix) signal output terminal (OPEN)
78	TI0	I	Test key (4×8 matrix) signal input terminal (Fixed at "L")
79	TI1	I	Test key (4×8 matrix) signal input terminal (Fixed at "L")
80	TI2	I	Test key (4×8 matrix) signal input terminal (Fixed at "L")

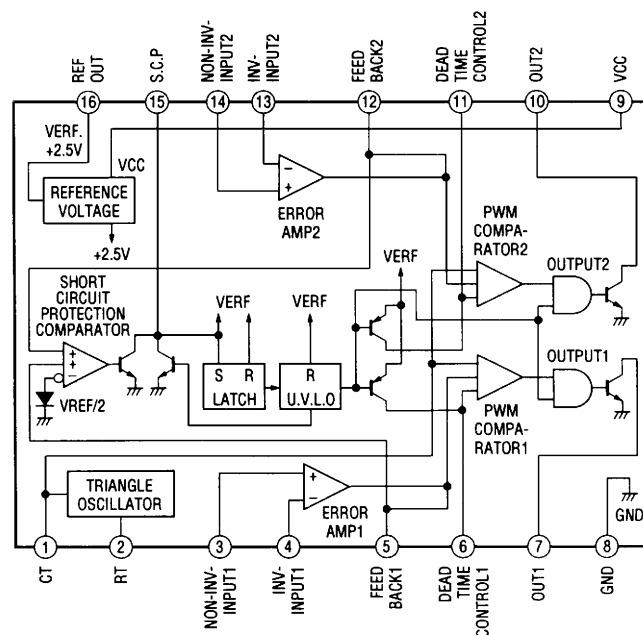
CXP84340-090Q



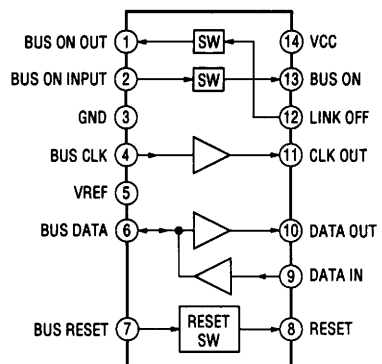
LB1638M



TL1451ACDB-E20



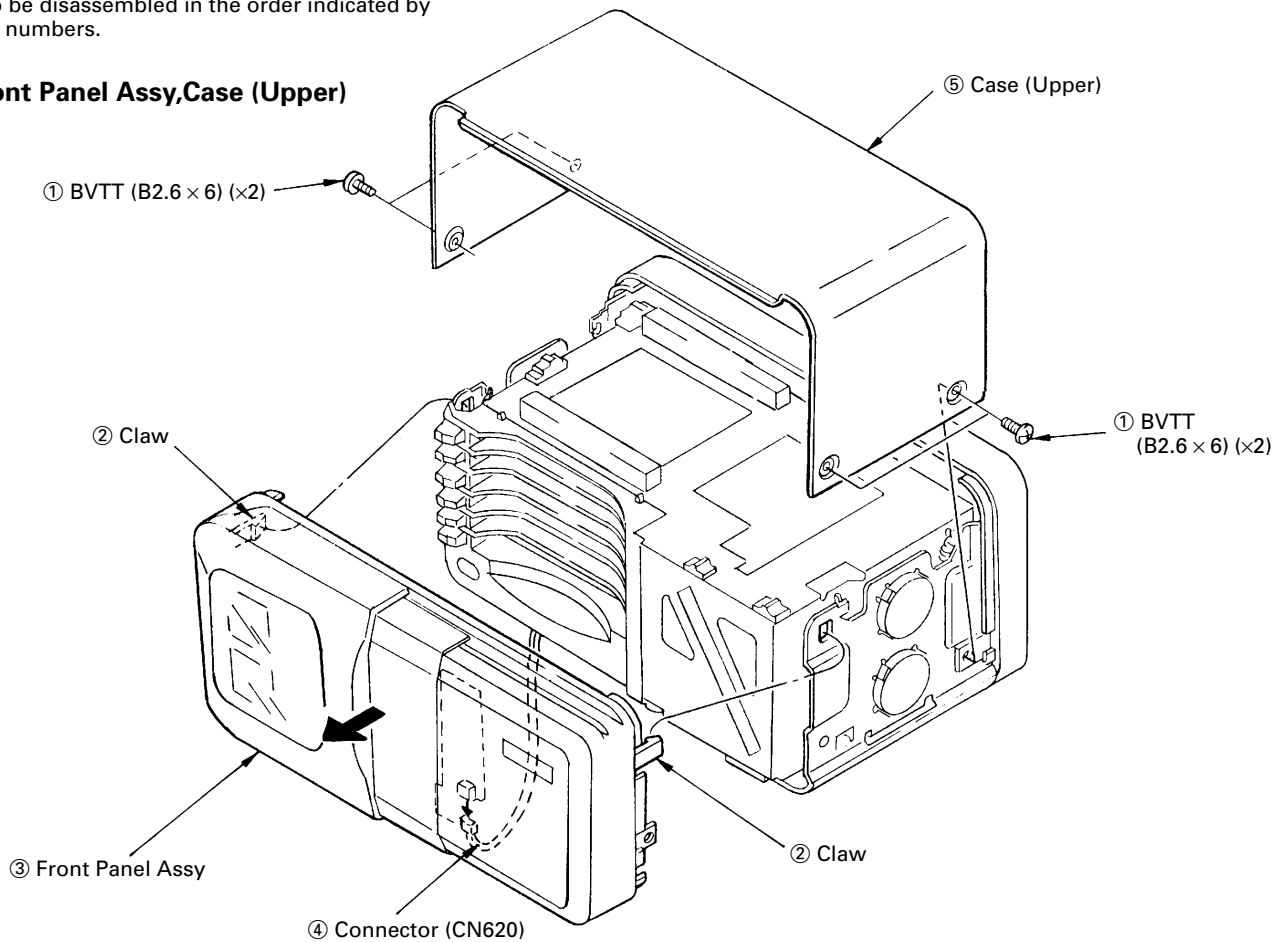
MM1284XFFE



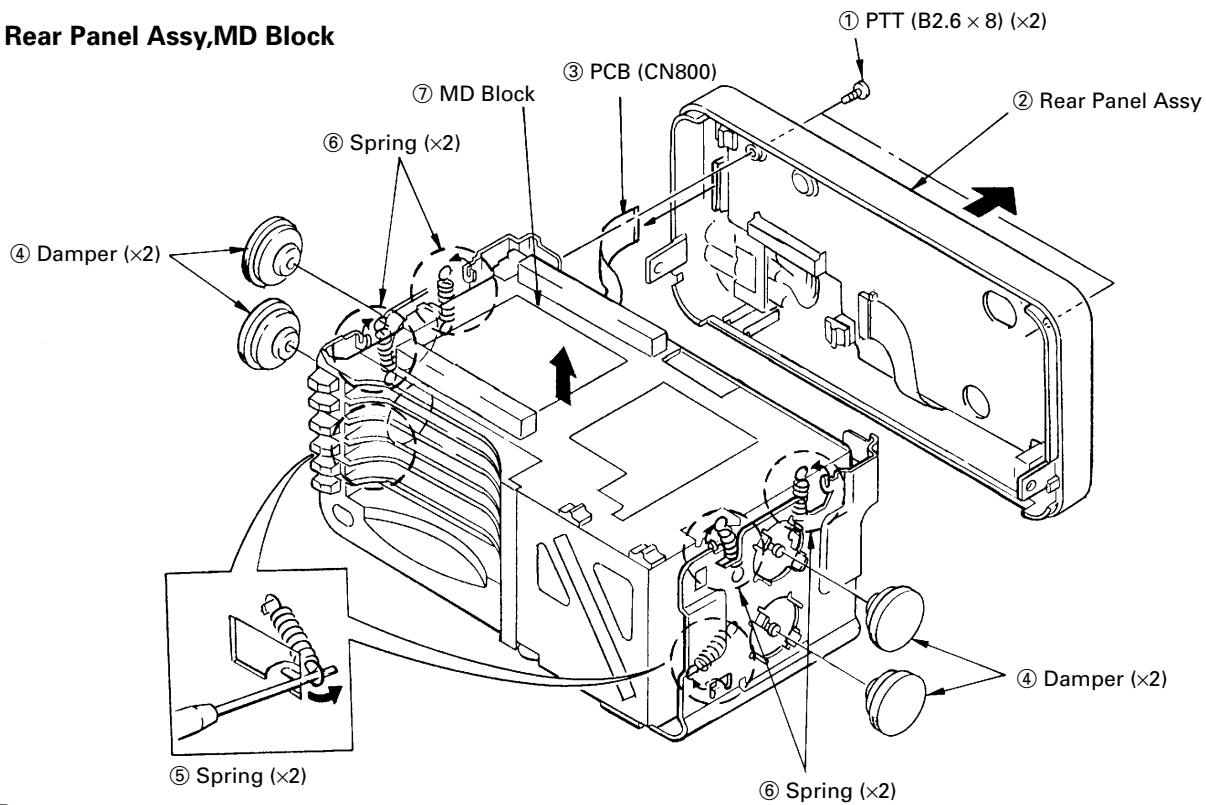
## 7.2 DISASSEMBLY

• Parts indicated as ① and so on in the illustration are to be disassembled in the order indicated by these numbers.

### ● Front Panel Assy, Case (Upper)

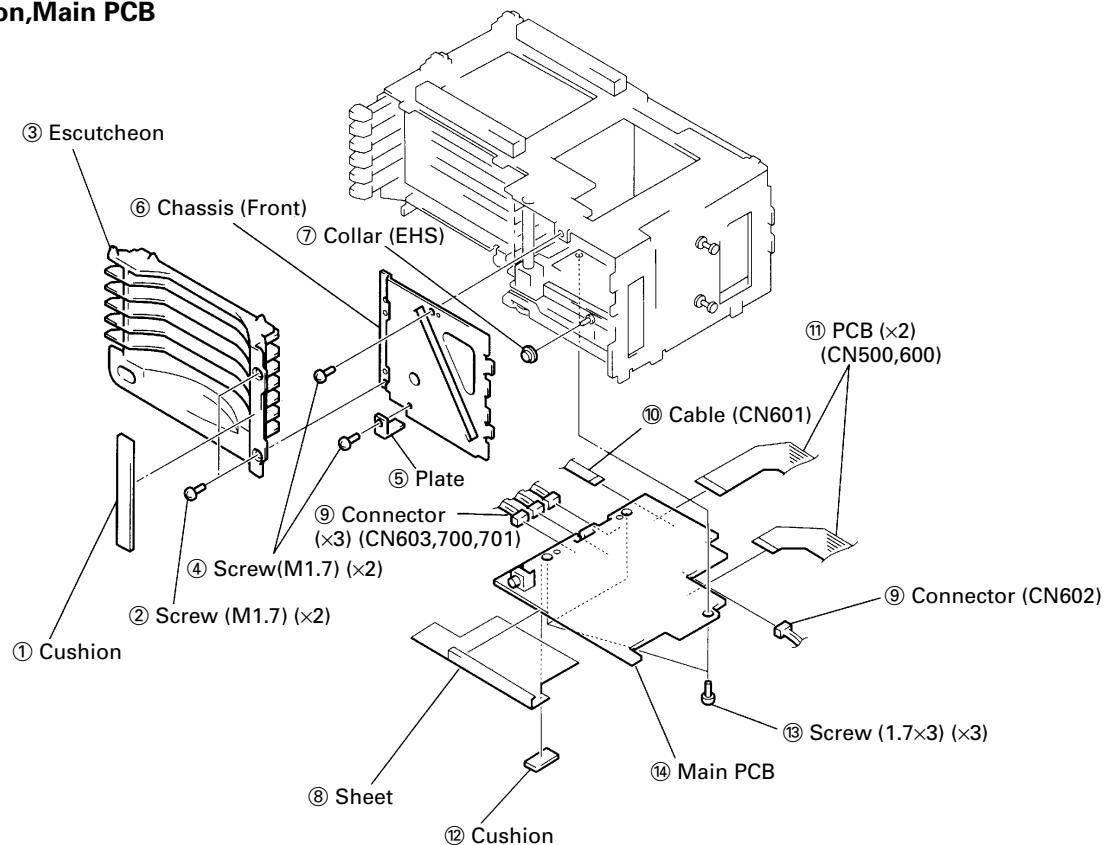


### ● Rear Panel Assy, MD Block

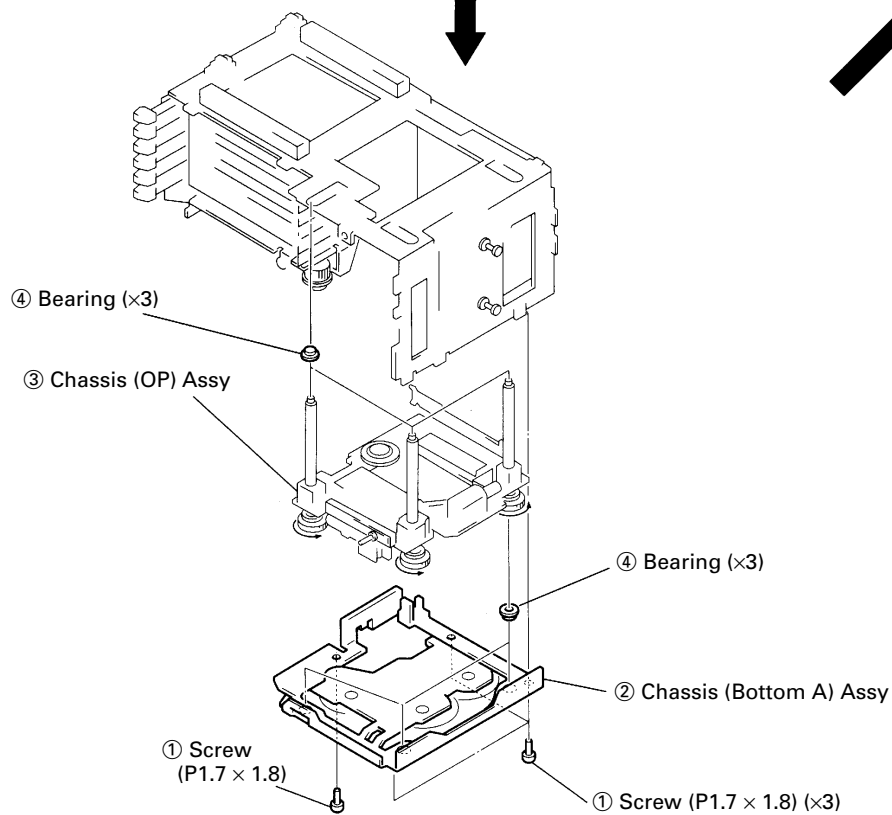




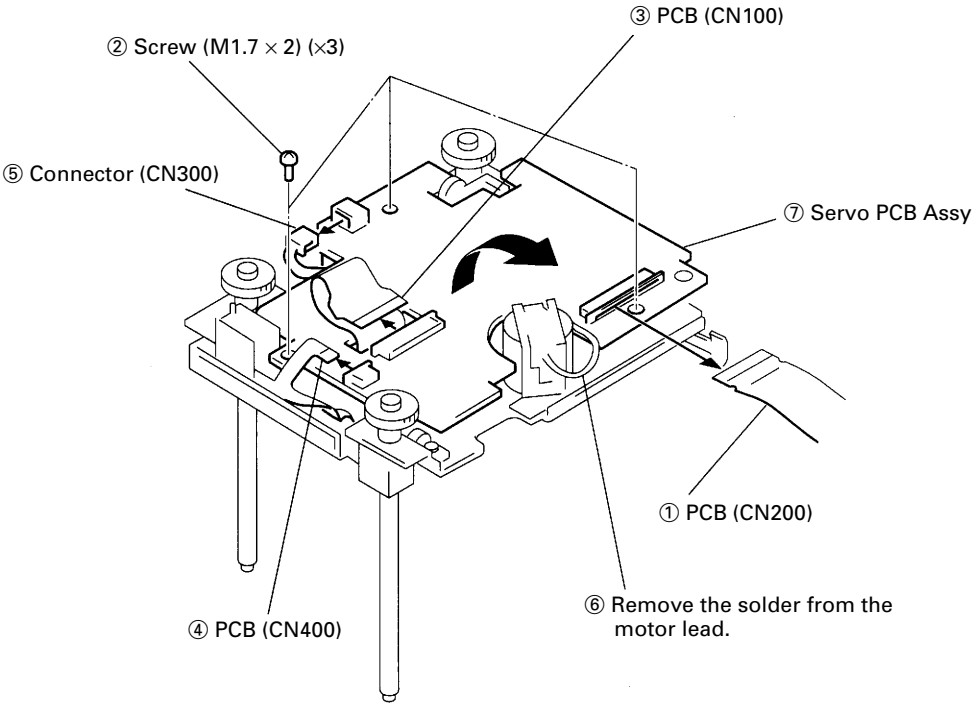
● Escutcheon, Main PCB



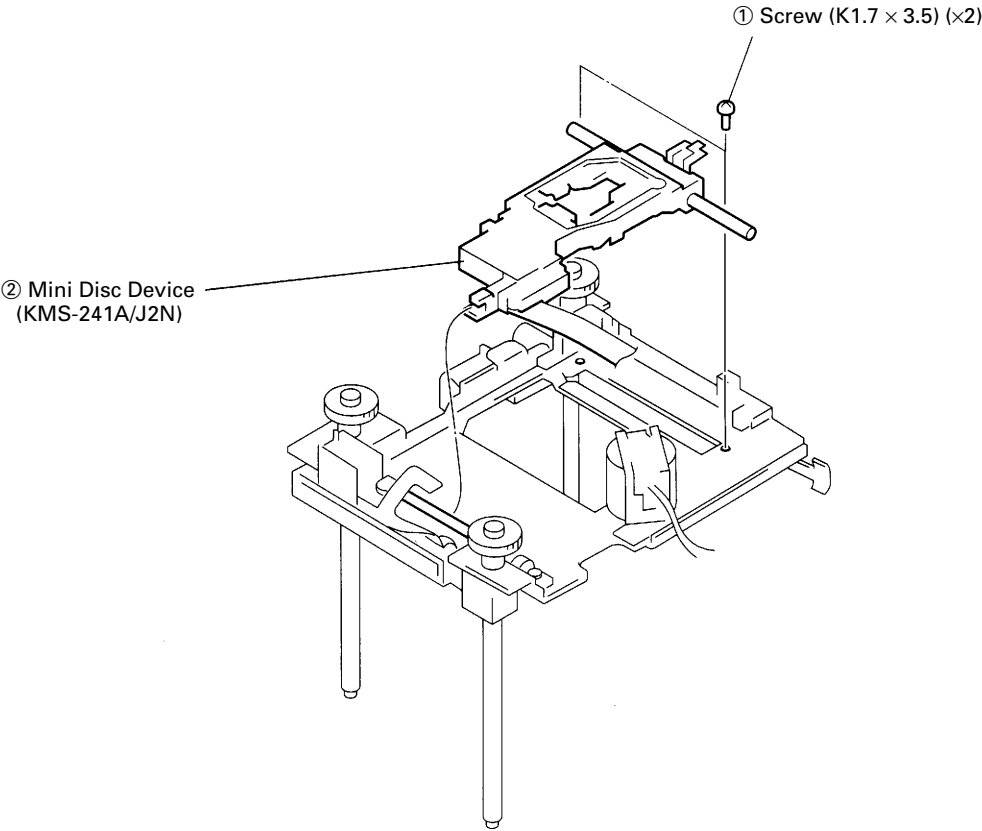
● Chassis (Bottom A) Assy, Chassis (OP) Assy



● Servo PCB

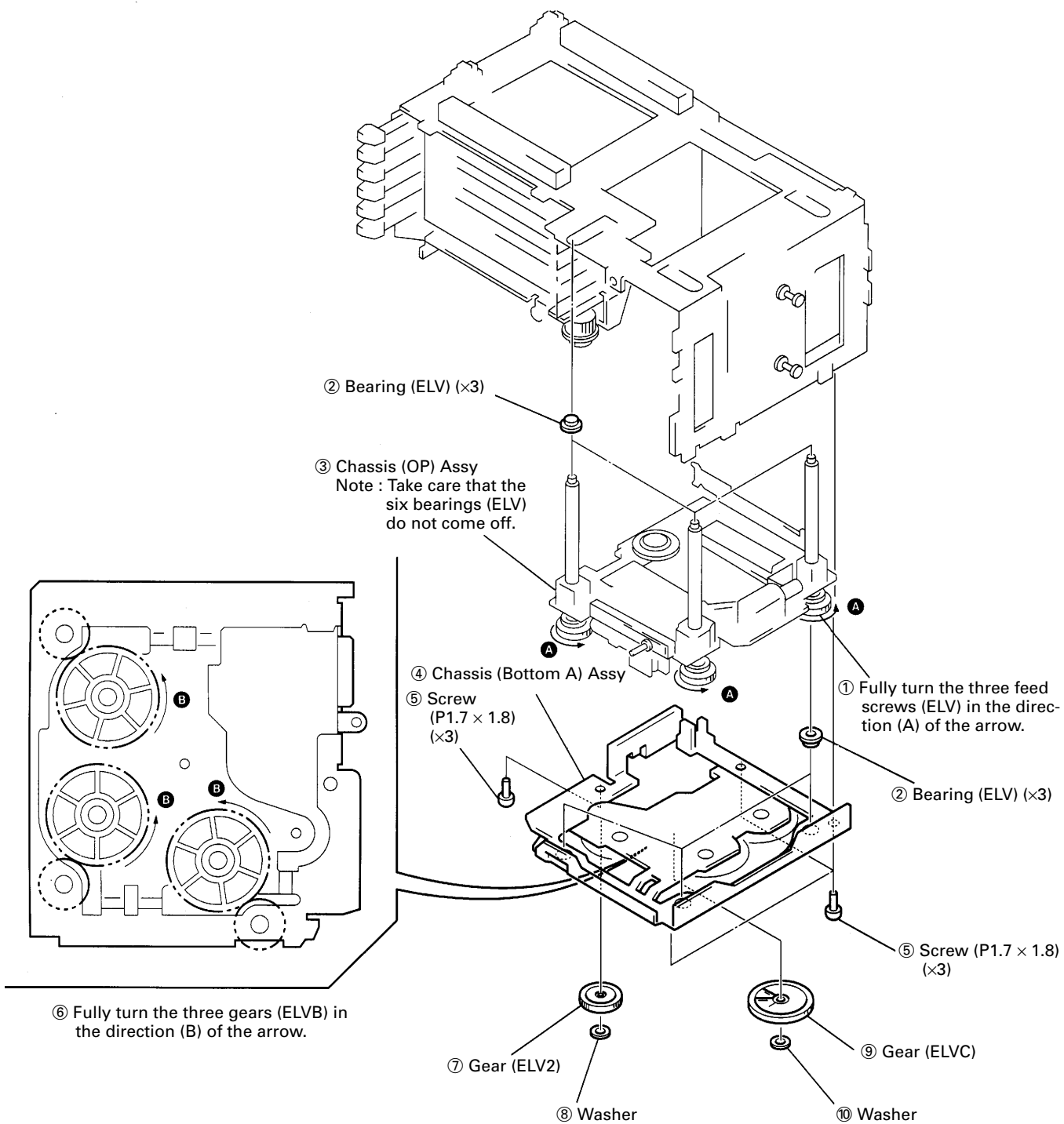


● Mini Disc Device

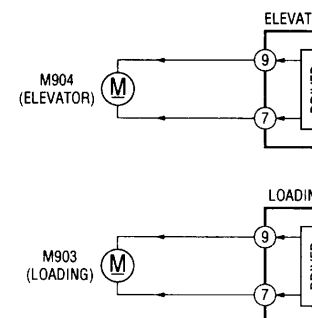
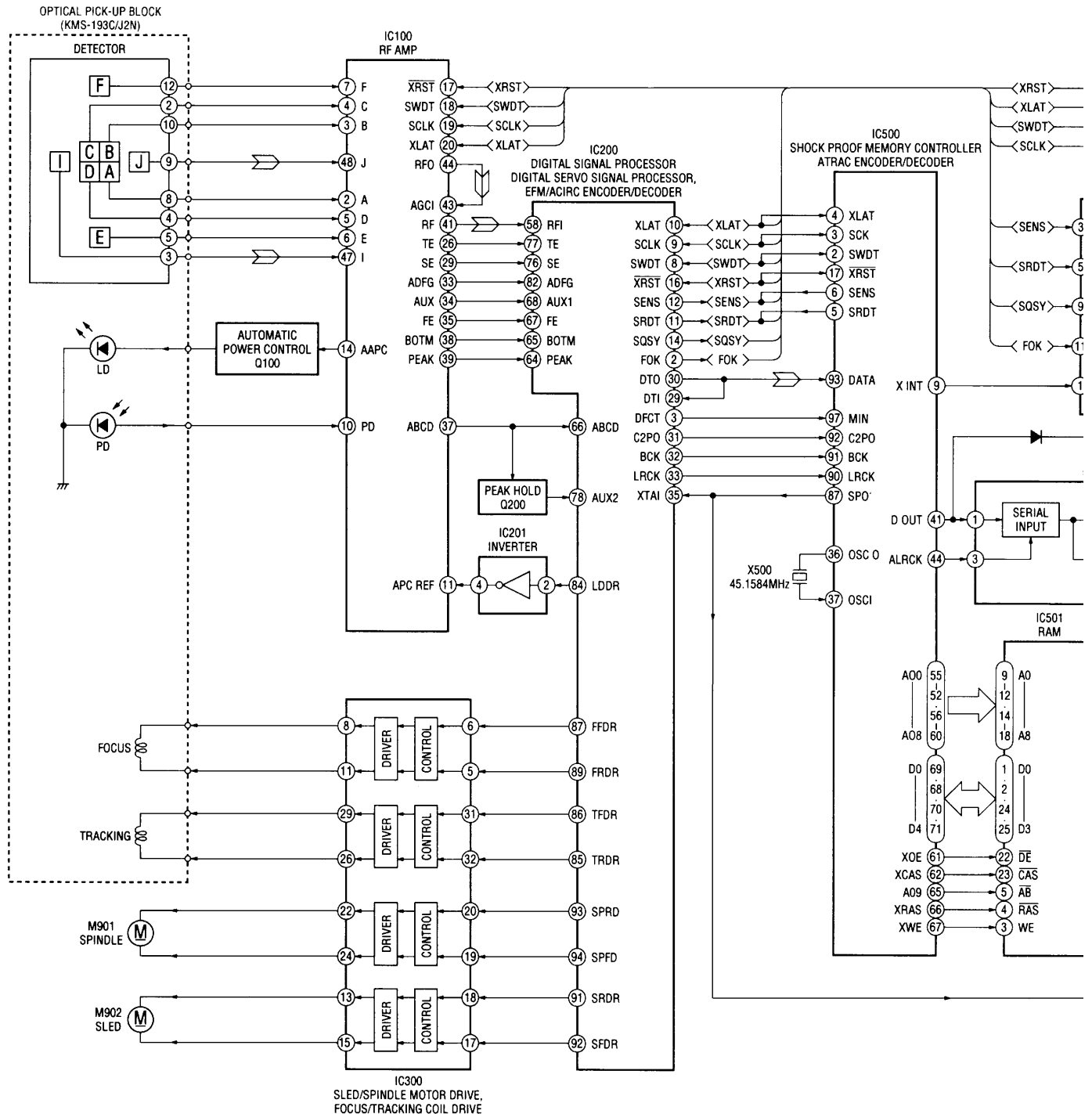


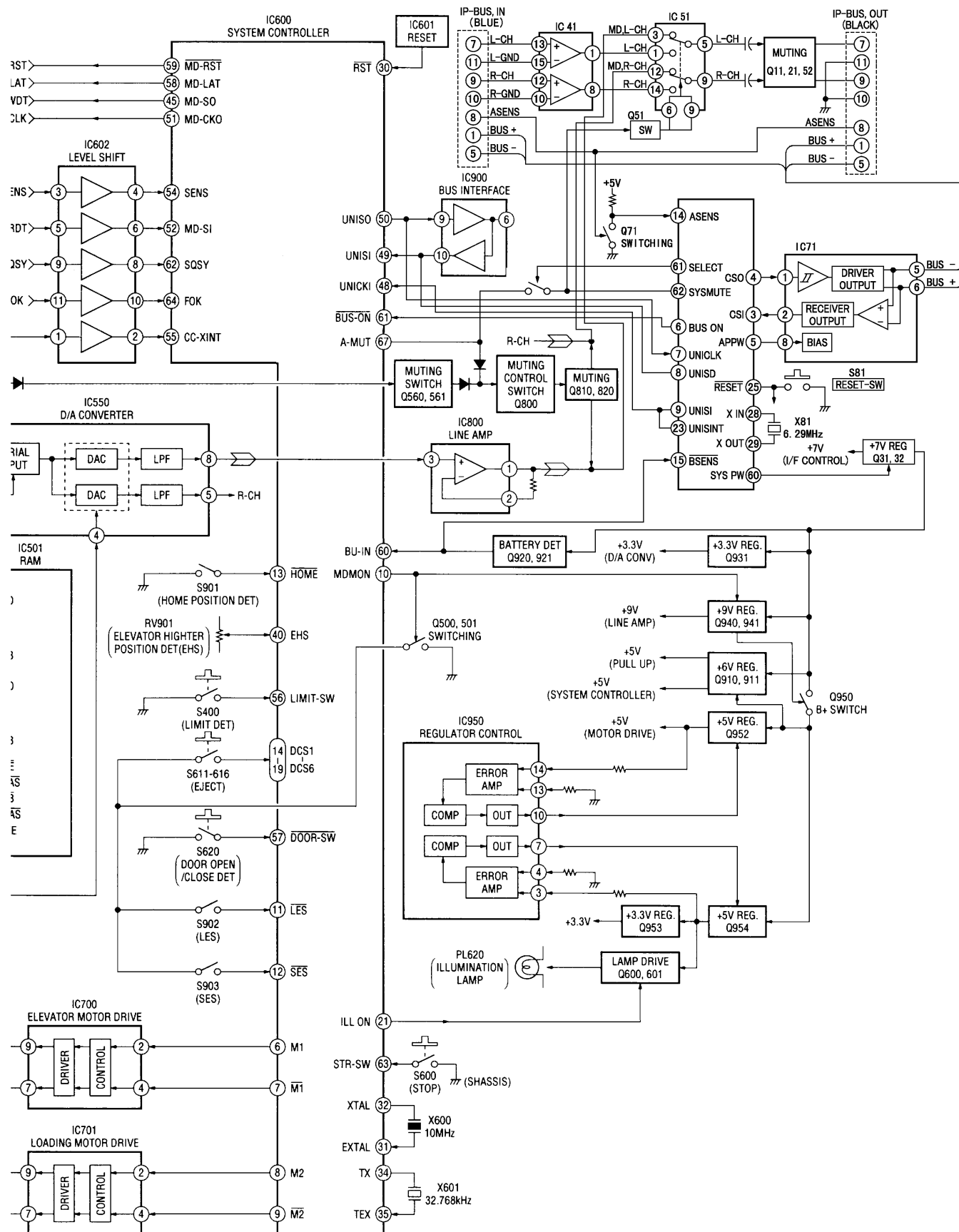
## ● Precautions on Reassembling the Chassis (OP) Assy

- Parts indicated as ① and so on in the illustration are to be reassembled in the order indicated by these numbers.



## 7.3 BLOCK DIAGRAM

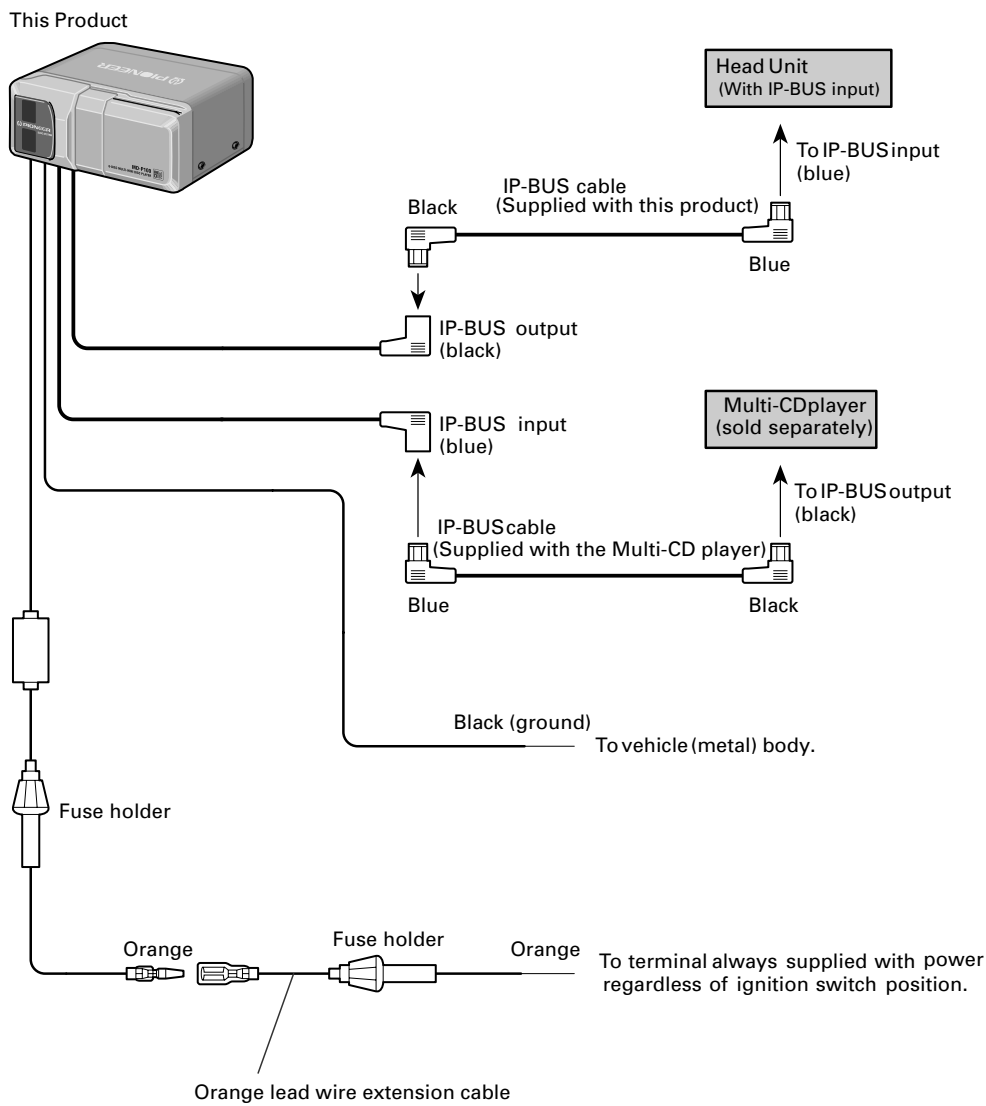




8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

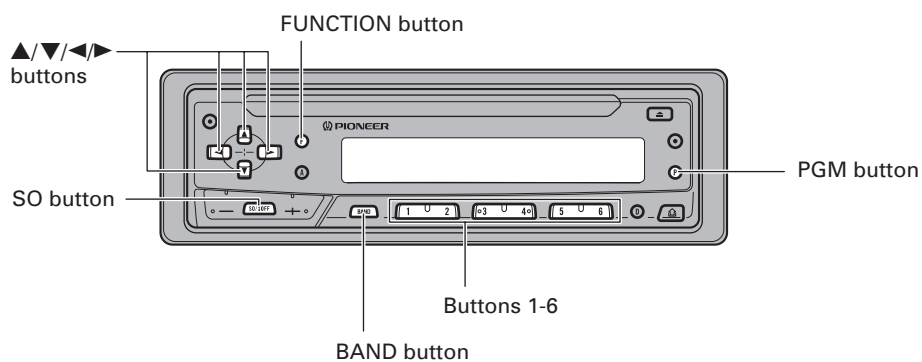
● Connection Diagram



## Key Finder

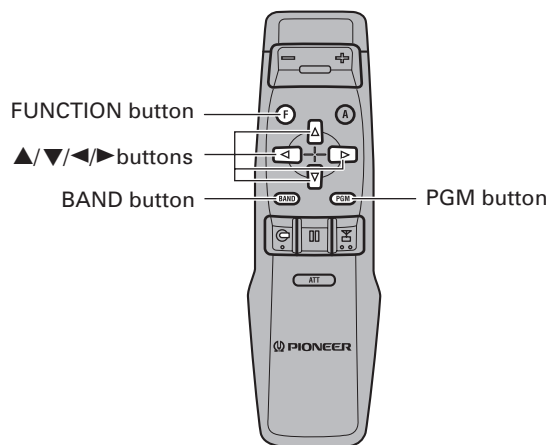
Operate Multi-MD Player functions with the buttons shown below.

### Head Unit (e.g. DEH-P645R)



### Remote Controller (e.g. DEH-P645R)

Operation is the same as when using buttons on the head unit.



## Basic Operation

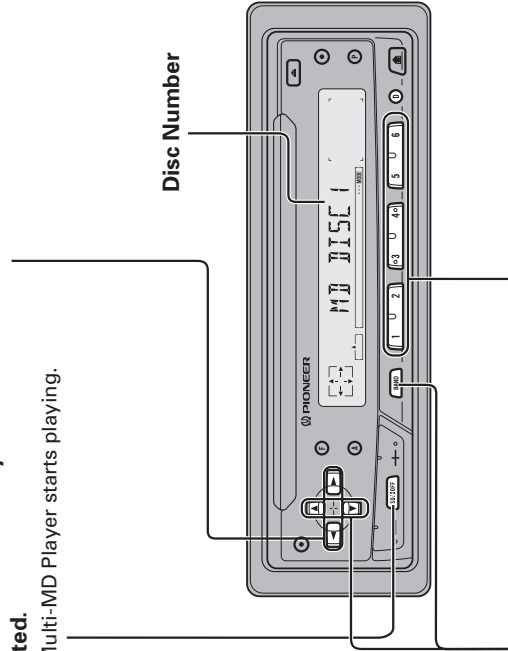
### Basic Operation of Multi-MD Player

#### Selecting the Multi-MD Player Source

##### Track Search

- Press the SO button repeatedly until the Multi-MD Player is selected.

The Multi-MD Player starts playing.



#### Disc Search

- Press the ▲ or ▼ button to select the desired disc. (Disc Up/Down)
- Press the BAND button to select the desired disc. (Disc Up)

#### Disc Number Search

- You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.

#### Note:

- If you switch to the Fast Forward/Reverse Mode, the ◀ and ▶ buttons operate Fast Forward/ Reverse.
- The player reads and memorizes music data recorded on an MD before reproducing it. Because of this, you can enjoy the following features.
  - \* When the last track on an MD has finished, the player automatically changes to the next MD. Because this change occurs while music data is being played from memory, the interval between the end of the last track on one MD and the start of the first track on the next is shorter.
  - \* During the time taken to switch between MDs using Disc Search, memorized music data of the previous track is played at reduced volume level.

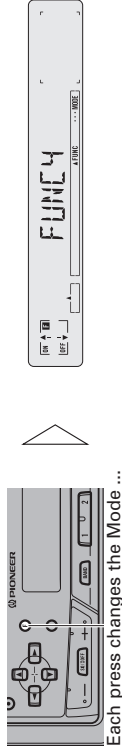
### Entering the Function Menu

The Function Menu lets you operate simple functions for the Multi-MD Player.

#### Note:

- After entering the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

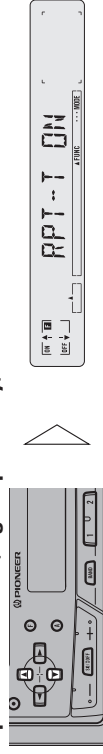
1. Select the desired mode in the Function Menu. (Refer to "Function Menu Functions".)



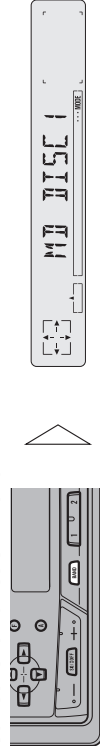
#### Note:

- When you select the Function Menu, Mode indications (e.g. FUNC4) light for about 2 seconds. After Mode indications have disappeared, the "F" indicator flashes to inform you that you are in the Function Menu.
- If you cancel the Function Menu, the "F" indicator goes out.

2. Operate a mode. (e.g. Repeat Play)



3. Cancel the Function Menu.





Basic Operation

Function Menu Functions

The following chart shows functions in the Multi-MD Player Function Menu. This chart shows the function operation and button for each function. For details concerning an operation, refer to the page indicated.

● Multi-MD Player		
Function name (Display)	Button	:Operation
Display Mode (FUNC1)	▲ or ▼	:Select
Random Play (FUNC2)	▲ or ▼ (Hold for 2 seconds)	:Select
Scan Play (FUNC3)	▲ or ▼	:Select
Repeat Play (FUNC4)	▲ or ▼	:Select
Track Selection Mode (AUTO/MANUAL)	◀ or ▶	:Select

**8.2 SPECIFICATIONS**

Power source 14.4 V DC (10.8 – 15.1 V allowable)  
Grounding system ..... Negative type  
Max. current consumption ..... 0.8 A  
Dimensions ..... 176 (W) × 83.5 (H) × 133 (D) mm  
Weight ..... 1.2 kg  
System ..... Mini disc digital audio system  
Usable discs ..... Mini disc  
Frequency characteristics .. 20 – 20,000 Hz (±1 dB)  
Signal-to-noise ratio 95 dB (1 kHz) (IEC-A network)  
Output level ..... 1 V (1 kHz, 0 dB)  
Number of channels ..... 2 (stereo)